Issue 225
PS
1971 Series
August

THE PREVENTIVE MAINTENANCE MONTHLY

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET
(TM 38-750)

Gus

TYPE INSPECTION

TM DATE

the sequence listed in

deficiency or short-

mpleted corrective

TERMINED

ALL INSPECTIO AND EQUIPMENT CONDITION ECORDED ON THIS FORM HAV
IN ACCORDANC WITH DIAGNOSTIC PROCE AND STANDARDS IN THE TM CITED HEREON.

SIGNATURE (Person(s) perfor ng inspection) 8b. TIME 9a ATURE (Maintenance Supervisor) 9b. TIME 10. MANHOURS REQUIRED

TM ITEM NO a	STATUS b	DEFI NCIES AND SHORTCO c	INITIAL WHEN CORRECTED e

DA FORM 2404

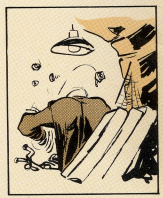
DRIVER TRAINING
(SEE PAGE 2)

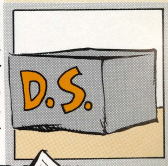
Will Eisner

WANTED
NAME: Alvin "Ambi" Dexter, alias "Wire 'n' wrap it," "Tie-and-tacweld," or "Any-ol' screw'll do." Never stumped by any gismo. Wades in with "Nothin' to it, le'me see inside 'er!" Sometimes called "Fix-Fingers."
D.S.
DEXTER STRIKES AGAIN

WANTED

For Destruction of Army Equipment.





NAME: Alvin "Ambi" Dexter, alias "Wire 'n' wrap it," "Tie-and-tacweld," or "Any-ol' screw'll do." Never stumped by any gismo. Wades in with "Nothin' to it, le'me see inside 'er!" Sometimes called "Fix-Fingers."

TEARS DOWN COMPONENTS FOR A LOOK-SEE: Says the Maintenance allocation chart (MAC) is for short-timers with lacka-knowhow.

ADJUSTS EVERYTHING IN SIGHT: Whether it needs it or not.

DEMONSTRATES (ON DELICATELY ADJUSTED GEAR): "Here's how we did it on the old Z-18 with nothing but a nail file, pliers 'n' safety wire!" (Then sends it back to DS, GS – or maybe all the way to depot rebuild – to get things back in sync again.)

DISTINGUISHED BY: Extreme confidence. Scorns review of TM and LO procedures. Apparent knowledge of wide range of equipment often leads the unwary to "buy" his short-cut solutions. Despite youth, wears "air" of having "grown up" with all models of items – from A-1 to Z-13.

ARMED – AND READY TO USE: Whole slew of specially-built gismos and thingamajigs, tools – from jeweler's screwdriver to crescent or pipe wrench, and make-do items like baling wire – and files for making wrong-sizes fit.

PS

Published by the Department of the Army for the information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from U. S. Army Maintenance Board, Attn.: PS Magazine, Fort Knox, Kentucky 40121.

THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 225 1971 Series

August

IN THIS ISSUE

GROUND MOBILITY 2-19, 26-27

Driver PM 2-6
Tie-down Rope 7
Spot-Check Poop 8-9
Engine Air Cleaners 10-17
M715 Rubber Bumpers 18
No Polish, Please! 19
Stencil Markings 19
Tank Hydraulic Brakes 26
M113A1 Oil Filter 26
M551 27

FIREPOWER 28-36

Shillelagh 28-29
.38-Cal Pistol 30-31
Hawk Notes 32-36

AIR MOBILITY 45-57

Huey 45, 52-53, 54, 55
DA 2408-13 46-47
Commercial Oils 48-49
CH-47 50-51
Bird Tire Gage 53
U-1A 54
OV-1 55
OH-6A 56
Avionics Cable Savers 57
Cargo Sling 57

COMMUNICATIONS 58-63

Shelter Care 58-60
AN/MPQ-4A 60
AN/GRA-4 61
Antenna Thread Lube 61
TA-1/PT 62-63

COMBAT SUPPORT

Protective Mask 64-71
Heavy Equipment Tips 72-74
HD16M Tractor 75
Cancellation Word 75
Supply 17, 18, 26, 27, 36, 50, 51, 52, 54, 60, 61, 68, 71 & 76.
New Publications 79
M320T Crane 76
DA 2765 76
SB 700-20 77
PLL 78

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 22 January 1971.

DISTRIBUTION: In accordance with requirements submitted on DA Form 12-4.

PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

MSG Half-Mast,
PS Magazine,
Fort Knox, Ky.
40121

For Destruction of Army Equipment.

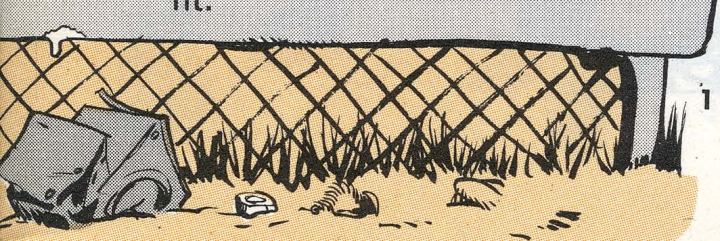
TEARS DOWN COMPONENTS FOR A LOOK-SEE: Says the Maintenance allocation chart (MAC) is for short-timers with lacka-knowhow.

ADJUSTS EVERYTHING IN SIGHT: Whether it needs it or not.

DEMONSTRATES (ON DELICATELY ADJUSTED GEAR): "Here's how we did it on the old Z-18 with nothing but a nail file, pliers 'n' safety wire!"
(Then sends it back to DS, GS – or maybe all the way to depot rebuild – to get things back in sync again.)

DISTINGUISHED BY: Extreme confidence. Scorns review of TM and LO procedures. Apparent knowledge of wide range of equipment often leads the unwary to "buy" his short-cut solutions.
Despite youth, wears "air" of having "grown up" with all models of items – from A-1 to Z-13.

ARMED – AND READY TO USE: Whole slew of specially-built gismos and thingamajigs, tools – from jeweler's screwdriver to crescent or pipe wrench, and make-do items like baling wire – and files for making wrong-sizes fit.



PS

Published by the Department of the Army for the Information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from U. S. Army Maintenance Board, Attn.: PS Magazine, Fort Knox, Kentucky 40121.

THE **PREVENTIVE MAINTENANCE** MONTHLY

Issue No. 225 1971 Series

August

IN THIS ISSUE

GROUND MOBILITY 2-19, 26-27

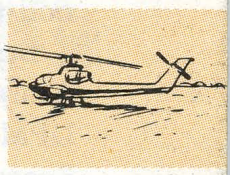
Driver PM 2-6
Tie-down Rope 7
Spot-Check Poop 8-9
Engine Air Cleaners 10-17
M715 Rubber Bumpers 18
No Polish, Please! 19
Stencil Markings 19
Tank Hydraulic Brakes 26
M113A1 Oil Filter 26
M551 27

FIREPOWER 28-36

Shillelagh 28-29
.38-Cal Pistol 30-31
Hawk Notes 32-36

AIR MOBILITY 45-57

Huey 45, 52-53, 54, 55
DA 2408-13 46-47
Commercial Oils 48-49
CH-47 50-51
Bird Tire Gage 53
U-1A 54
OV-1 55
OH-6A 56
Avionics Cable Savers 57
Cargo Sling 57



COMMUNICATIONS 58-63

Shelter Care 58-60
AN/MPQ-4A 60
AN/GRA-4 61
Antenna Thread Lube 61
TA-1/PT 62-63

COMBAT SUPPORT

Protective Mask 64-71
Heavy Equipment Tips 72-74
HD16M Tractor 75
Cancellation Word 75
Supply 17, 18, 26, 27, 36, 50, 51 52, 54, 60, 61, 68, 71 & 76.
New Publications 79
M320T Crane 76
DA 2765 76
SB 700-20 77
PLL 78

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 22 January 1971.

DISTRIBUTION: In accordance with requirements submitted on DA Form 12-4.

PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

MSG Half-Mast,
PS Magazine,
Fort Knox, Ky.
40121

Drive with pride

How's an Army truck like a sweet, beautiful, normal girl?

They both appreciate a good operator who knows what to do and how to do it — and does it!

With all your good looks, your smooth line and a pocketful of bread, you know that gal will split the scene if you don't keep her happy — coming back for more.

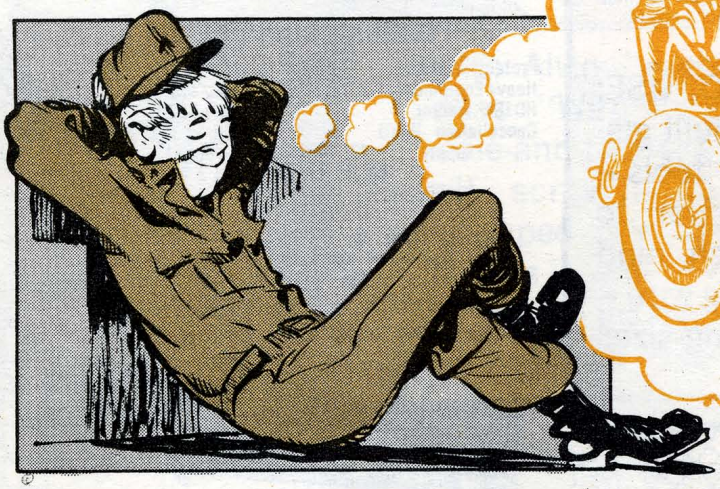
Same goes for your truck.

You might've been the hottest stick-slapper on the asphalt as a civilian, but you'll have to do better than that to win your SF 46 — Operator's Identification Card.

Besides being a QAD (Qualified Army Driver), you'll have to be a DPME (Driver Preventive Maintenance Expert).

REMEMBER WHEN?

You used to pull into a gas station and tell the guy, "Put in a buck's worth, check the oil, battery, radiator 'n' tires — 'n' clean the windshield."



Drive with pride as a... QAD With DPME

How's an Army truck like a sweet, beautiful, normal girl?

They both appreciate a good operator who knows what to do and how to do it — and does it!

With all your good looks, your smooth line and a pocketful of bread, you know that gal will split the scene if you don't keep her happy — coming back for more.

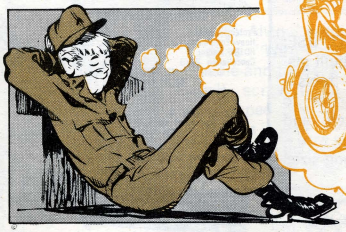
Same goes for your truck.

You might've been the hottest stick-slapper on the asphalt as a civilian, but you'll have to do better than that to win your SF 46 — Operator's Identification Card.

Besides being a QAD (Qualified Army Driver), you'll have to be a DPME (Driver Preventive Maintenance Expert).

REMEMBER WHEN?

You used to pull into a gas station and tell the guy, "Put in a buck's worth, check the oil, battery, radiator 'n' tires — 'n' clean the windshield."



And when you didn't have the scratch for gas, you just walked for a few days. Or you unlimbered your thumb. Or a pal with wheels got you over the hump. Or you just sat home and watched the boob tube.

No more, ol' buddy!

You're going to be the guy who makes sure —

— Your engine oil level reads at least over the ADD mark on the dipstick.

— Your radiator coolant level is about 1 inch below the bottom of the filler neck.

— Battery electrolyte, in all cells, is over the tops of the plates.

— Tires are carrying the right pressure.

— Fuel filters inspected for water and dirt.

— Your air cleaner's not plugged with dirt.

— Your fuel tank's filled up to the mark.

Oh yeah — and your windshield's clean.

And a lot of other things that help keep your truck ready, willing and happy.

PS MORE

as a... QAD with DPME

And when you didn't have the scratch for gas, you just walked for a few days. Or you unlimbered your thumb. Or a pal with wheels got you over the hump. Or you just sat home and watched the boob tube.

No more, ol' buddy!

You're going to be the guy who makes sure—

—Your engine oil level reads at least over the ADD mark on the dipstick.

—Your radiator coolant level is about 1 inch below the bottom of the filler neck.

—Battery electrolyte, in all cells, is over the tops of the plates.

—Tires are carrying the right pressure.

—Fuel filters inspected for water and dirt.

—Your air cleaner's not plugged with dirt.

—Your fuel tank's filled up to the mark.

Oh yeah—and your windshield's clean.

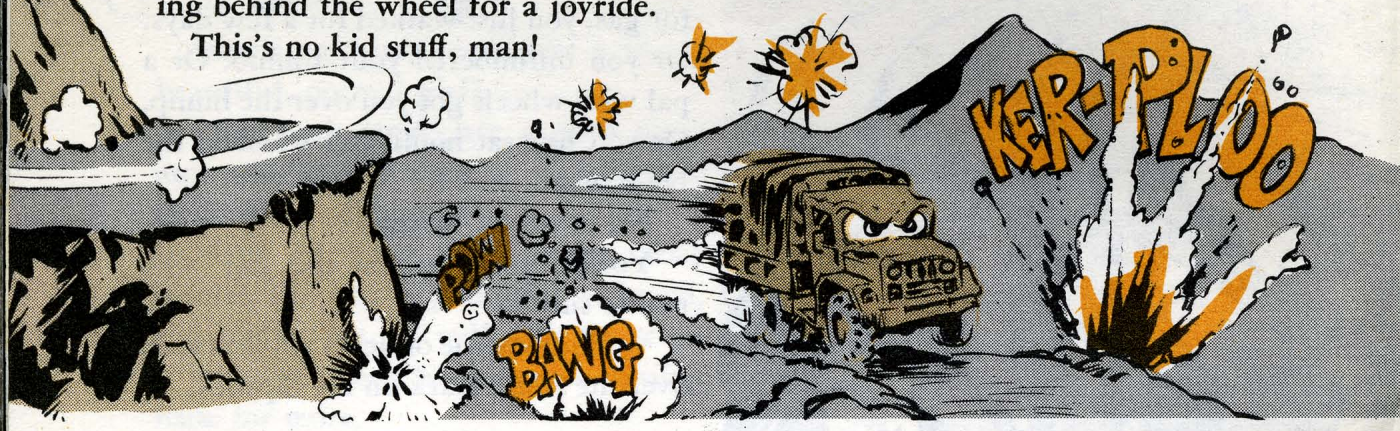
And a lot of other things that help keep your truck ready, willing and happy.

P.S MORE

FOR MEN ONLY

When you've finally got that SF 46 in your hot li'l hand and you're assigned a ¼-ton or a deuce-and-a-half or some other Army truck, you won't be climbing behind the wheel for a joyride.

This's no kid stuff, man!



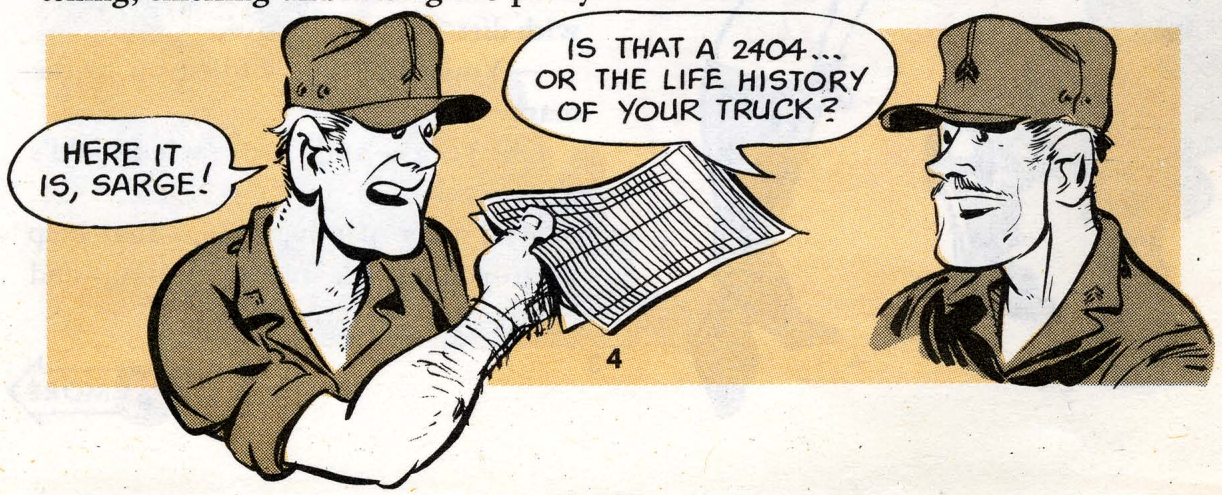
You'll be on a mission. A lot of people will be depending on you and your truck to get there — and back.

No matter how well you can drive, you're just a warm body holding down the seat if your truck can't move out or if it breaks down on the road.

SOAK UP THAT DPM

So make like a sponge when Driver Preventive Maintenance comes up in your training.

Sharpen your brain, your eyes, your ears — and even your nose. Looking, listening, smelling and feeling are pretty much what DPM is all about.



You may not be doing much fixing on your truck, but you'll sure be expected to spot anything going wrong and report it.

You're being measured partly for DPM when you take that Driver Selection Battery I or Battery II test.

DPM ALL THE WAY

You'll get plenty of Driver Preventive Maintenance if you go to one of the Army schools — Ft Leonard Wood, Ft Dix, Ft Jackson, Ft Ord or Ft Polk — to earn a driver's MOS 64A10. The course is listed in DA Pamphlet 350-10 (page 5-81-1) as Course No. 811-64A10.

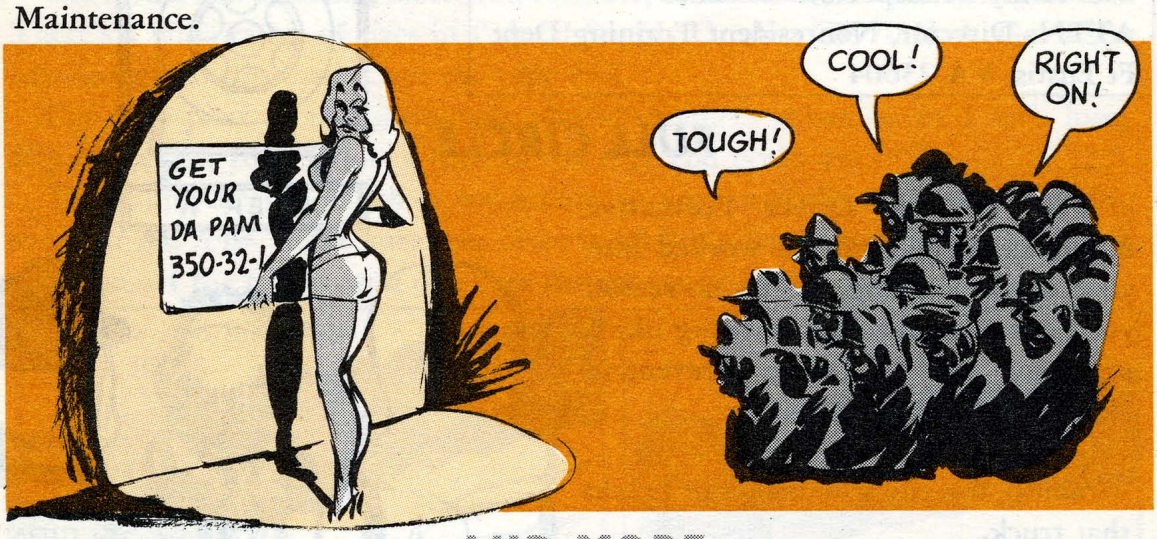
There's a chance, though, that you'll be shooting only for an SF 46 in your own local command's driving training course.

TM 21-300 w/Ch 1 (Oct 68), Driver Selection And Training (Wheeled Vehicles), hits hard at the need for plenty of training in Driver Preventive Maintenance.

Your unit needs this real handy guide for setting up a driver training program — Army Subject Schedule 55-64A10, MOS Technical Training And Refresher Training of Light and Heavy Vehicle Drivers.

There's good DPM poop, too, in DA Pam 350-32-1 (Jan 70), Operator Training Course for M151 ¼-Ton Truck. A lot of the stuff in this training course goes for any tactical truck.

Here again, you'll find the ol' spotlight shining bright on Driver Preventive Maintenance.



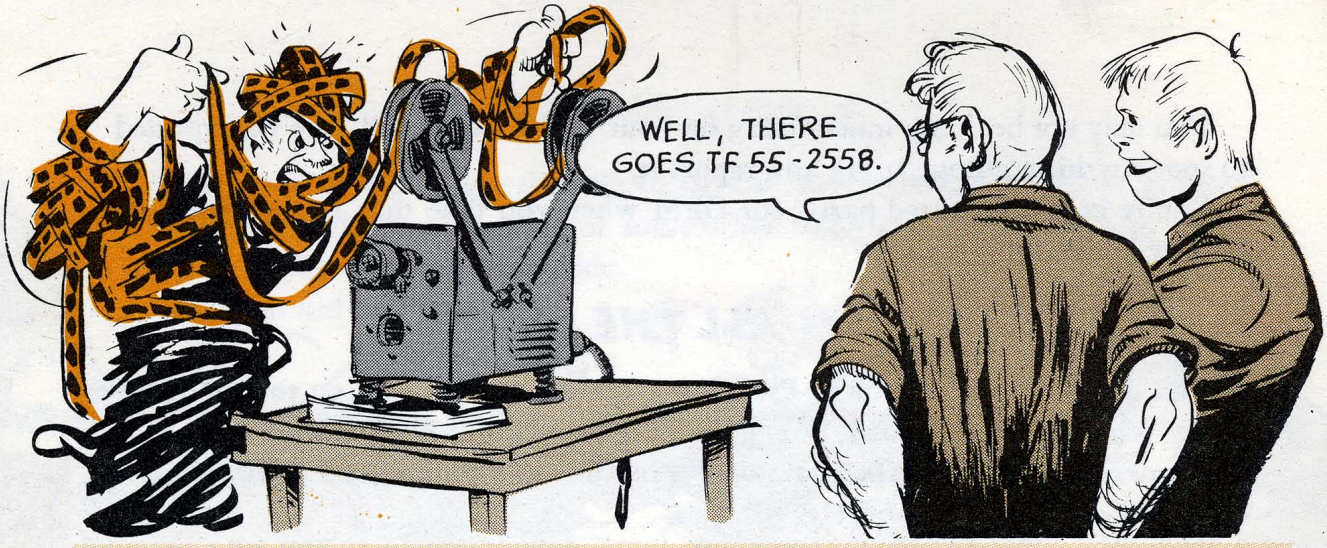
. . . AND MORE . . .

Just dandy for filling in the cracks are some of those films and other training aids listed in DA Pam 108-1 (May 69), Index of Army Motion Pictures And Related Audio-Visual Aids.

You won't want to miss these juicy training films:

TF 55-2558, "Automotive Preventive Maintenance, Before The Operation"

PS MORE



TF 55-2559, "Automotive Preventive Maintenance, During The Operation And At The Halt"

TF 55-2557, "Automotive Preventive Maintenance, After Operation"

There're lots more in both the 55-series and 9-series that put the whipped cream on your DPM training cake.

You can even get a headstart on your driver training and come out at the head of the class. See about signing up for MOS Related Correspondence Subcourse, Light Vehicle Driver MOS 64A. You get the poop in DA Pam 350-60 w/Ch 1 thru 15 (Jan 71), Announcement of Army Extension Courses.

Or get the info from:

Commandant
U.S. Army Transportation School
ATTN: Director, Nonresident Training Dept
Ft Eustis, VA 23604

FULL CIRCLE

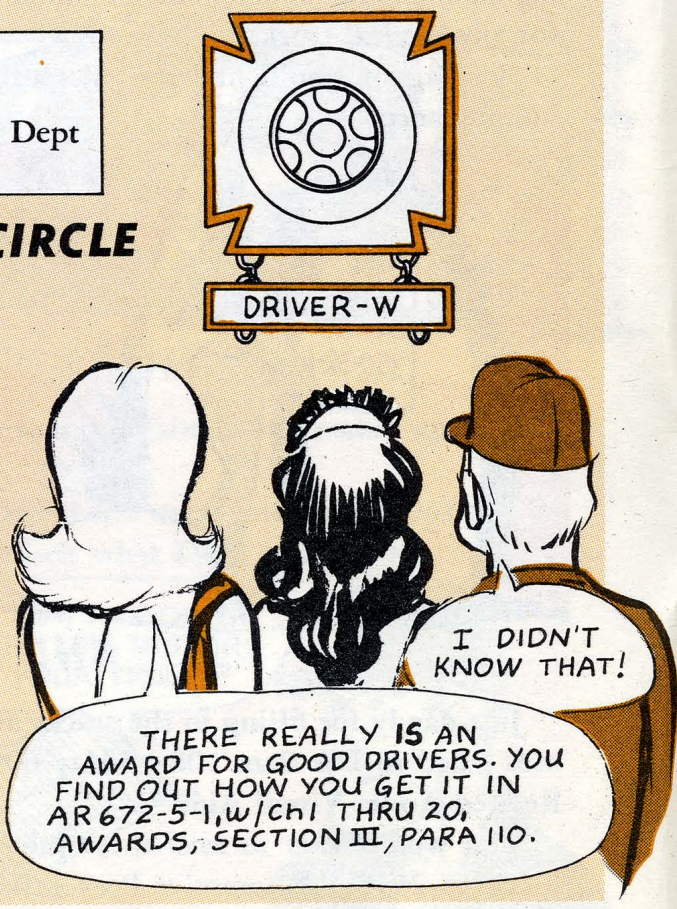
With all this Driver Preventive Maintenance that can be worked into your driver training, there's no reason you can't come through smelling like a rose—or like a Driver Preventive Maintenance Expert.

It's up to you.

You're the guy who makes or breaks that truck.

Like it says in your own driver's bible, TM 21-305 w/Ch 1 and 2 (Dec 69), Manual For The Wheeled Vehicle Driver:

"You are the most important single factor in preventive maintenance."



Dear Half-Mast,

What's the latest on rope tips — those metal bands around the ends of cargo cover tie-down ropes? Are replacement tips in the supply system yet?

SP5 E. E. G.

Dear Specialist E. E. G.,

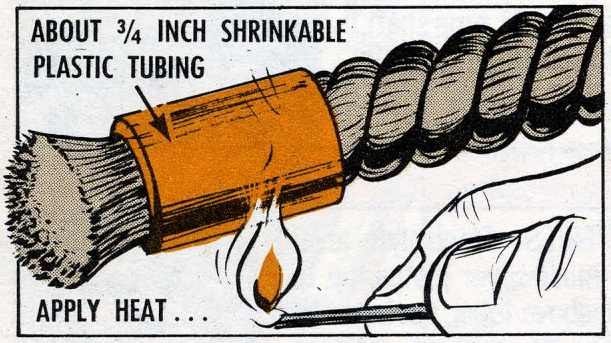
Those metal rope tips are not available in the supply system, and, from what I hear, they won't be.

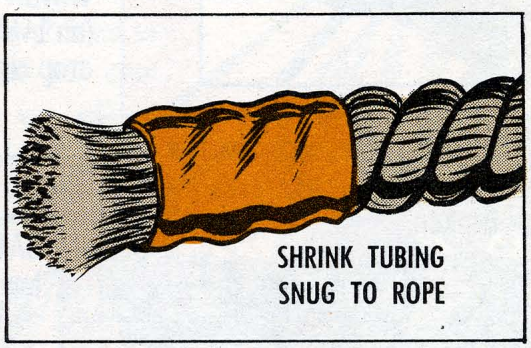
But the latest thing is plastic. What else?

Get Insulation Sleeving, Electrical, Flexible, **Shrinkable**, Plastic, MIL-I-23053. There's a wide range of sizes in Federal Supply Catalog C5970-IL-A. Get a size big enough to slip easily over the rope end.

Cut off a piece of this shrinkable plastic tubing — about ¾ to 1 inch long. Slip it over the rope so just a little of the rope end peeks out.

Then apply heat — match or torch flame — very carefully to shrink the tubing snug on the rope. Make sure you observe all fire safety precautions, like taking the rope off the tarp so you don't set the canvas on fire.





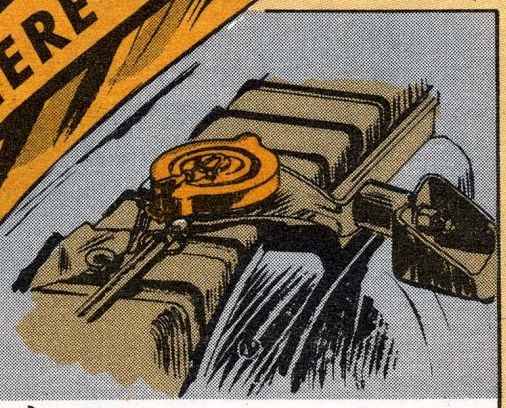
With a little practice, you can apply this fix to a rope end — neatly and just about permanently — in a few seconds.

SPOT CHECKS BEFORE YOUR EYES?

FIND WHERE TROUBLE LIES

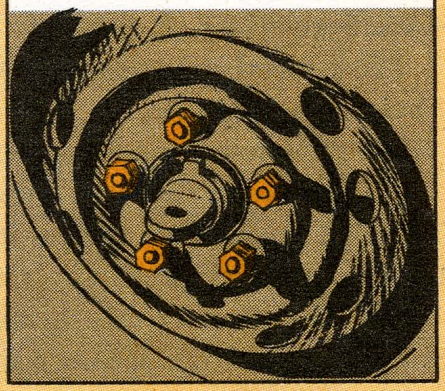
So your ¼-ton or deuce-and-a-half or whatever is runnin' fine?

Well, rub your baby blues — chances are 66 to 33 that one or more of these faults is ridin' alongside you right now — and if a roadside spot-check crew pulled you over, they'd see:

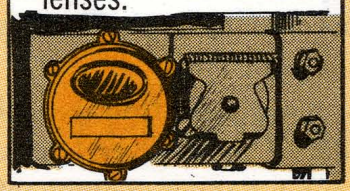


RADIATOR — Coolant level low, anti-freeze weak (in season), corrosion inhibitor weak.

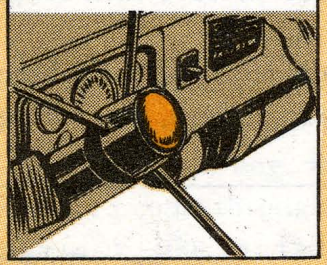
WHEELS — Lug nuts loose, bearings loose (not to be confused with loose axle/ball joint).



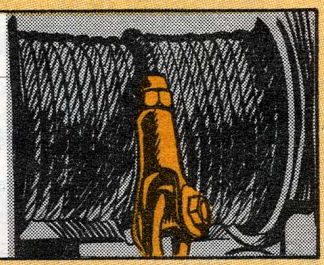
LIGHTS — Burned out, brake light not working, moisture inside lenses.



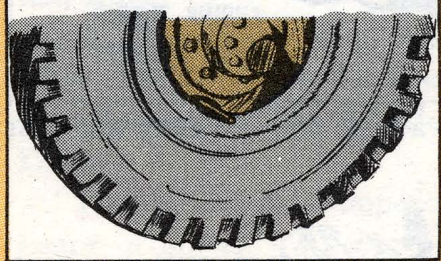
HORN — Won't work, stutters, button missing, wiring broken.



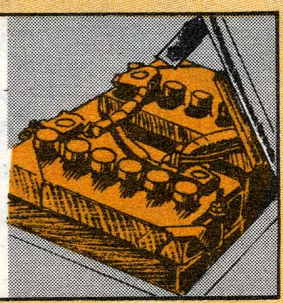
WINCH — Shear pin missing (on 1¼-ton truck, prop shaft'll drop right out if one's not in).



TIRES — Pressure too low or too high, cut, sidewalls broken.



BATTERIES—Electrolyte level low (must cover plates, up to ⅜-in above tops), posts or top corrosion-coated, cables crushed, insulation damaged, connections loose, tie-downs rusted.



SPOT CHECKS BEFORE YOUR EYES?

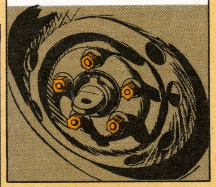
FIND WHERE TROUBLE LIES

So your ¼-ton or deuce-and-a-half or whatever is runnin' fine?

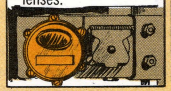
Well, rub your baby blues — chances are 66 to 33 that one or more of these faults is ridin' alongside you right now — and if a roadside spot-check crew pulled you over, they'd see:

RADIATOR — Coolant level low, anti-freeze weak (in season), corrosion inhibitor weak.

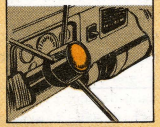
WHEELS — Lug nuts loose, bearings loose (not to be confused with loose axle/ball joint).



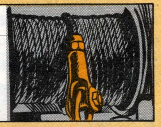
LIGHTS — Burned out, brake light not working, moisture inside lenses.



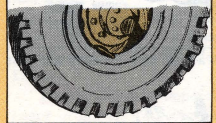
HORN — Won't work, stutters, button missing, wiring broken.



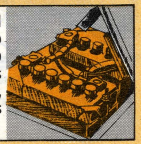
WINCH — Shear pin missing (on 1¼-ton truck, prop shaft'll drop right out if one's not in).



TIRES — Pressure too low or too high, cut, sidewalls broken.



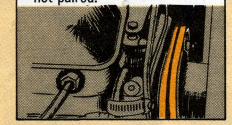
BATTERIES—Electrolyte level low (must cover plates, up to ⅜-in above tops), posts or top corrosion-coated, cables crushed, insulation damaged, connections loose, tie-downs rusted.



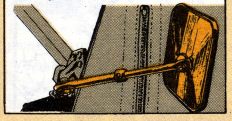
OIL LEVEL — Below the ADD mark.

DRIVER QUALIFICATIONS — Driver of vehicle unqualified for particular vehicle in use or SF 46 not up to date.

V-BELTS—Over-age, cracked, frayed, too loose/too tight, not paired.



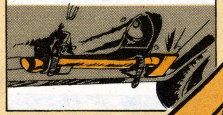
SIDE MIRRORS—Missing, unadjustable, loose, broken, too dirty to use.



WINDSHIELD — Cracked, glass loose; wiper blades too old, wiper not working.

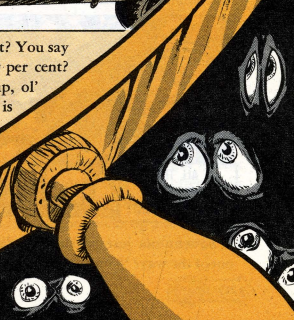
DA FORM 2404—Not with the vehicle. Blocks 1 thru 3 plus blocks 6 and 7 not filled in. Faults readily detectable by operator not entered on DA 2404 or DA 2408-14.

BII — Equipment missing or improperly maintained; unauthorized substitutes carried.



LOG BOOK—No dispatch date on DA 2408-1 daily (when log is used for dispatch). No fault symbol on DA 2408-1 daily for uncorrected fault listed on DA 2404 or DA 2408-14. No check mark on DA 2408-1 daily to indicate vehicle is operational. Required form or forms not in log.

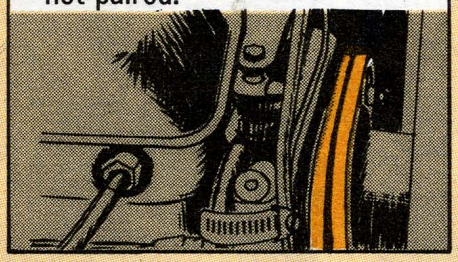
What's that? You say you passed 100 per cent? Well pucker up, ol' Buddy, Connie is on her way!



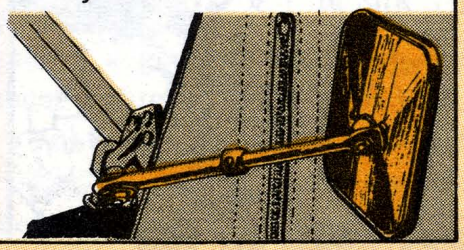
OIL LEVEL — Below the ADD mark.

DRIVER QUALIFICATIONS — Driver of vehicle unqualified for particular vehicle in use or SF 46 not up to date.

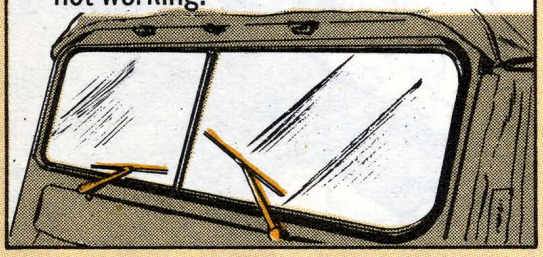
V-BELTS—Over-age, cracked, frayed, too loose/too tight, not paired.



SIDE MIRRORS—Missing, unadjustable, loose, broken, too dirty to use.

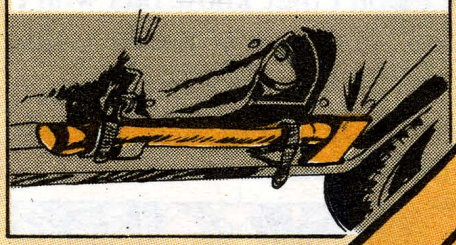


WINDSHIELD — Cracked, glass loose; wiper blades too old, wiper not working.



DA FORM 2404—Not with the vehicle. Blocks 1 thru 3 plus blocks 6 and 7 not filled in. Faults readily detectable by operator not entered on DA 2404 or DA 2408-14.

BII — Equipment missing or improperly maintained; unauthorized substitutes carried.



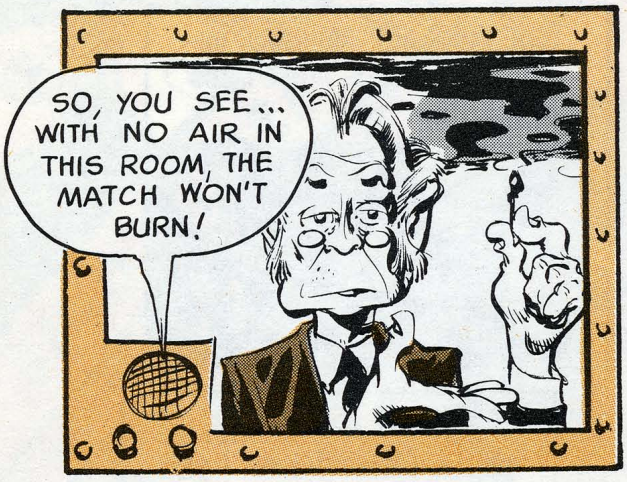
LOG BOOK—No dispatch date on DA 2408-1 daily (when log is used for dispatch). No fault symbol on DA 2408-1 daily for uncorrected fault listed on DA 2404 or DA 2408-14. No check mark on DA 2408-1 daily to indicate vehicle is operational. Required form or forms not in log.

What's that? You say you passed 100 per cent? Well pucker up, ol' Buddy, Connie is on her way!

ENGINE AIR CLEANERS...

STARVATION

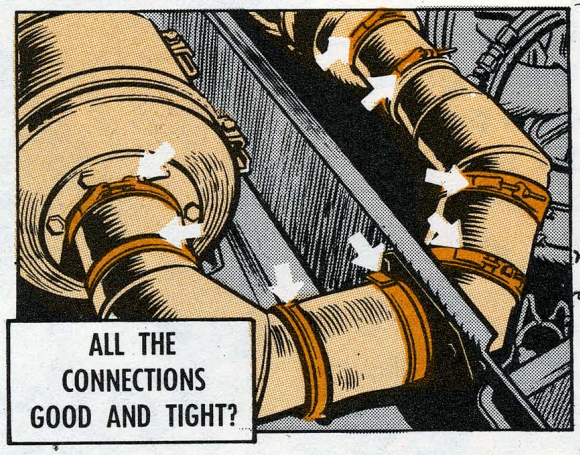
You can't even light a match without air. To burn 'most anything, you've got to feed it air. Like oxygen, man!

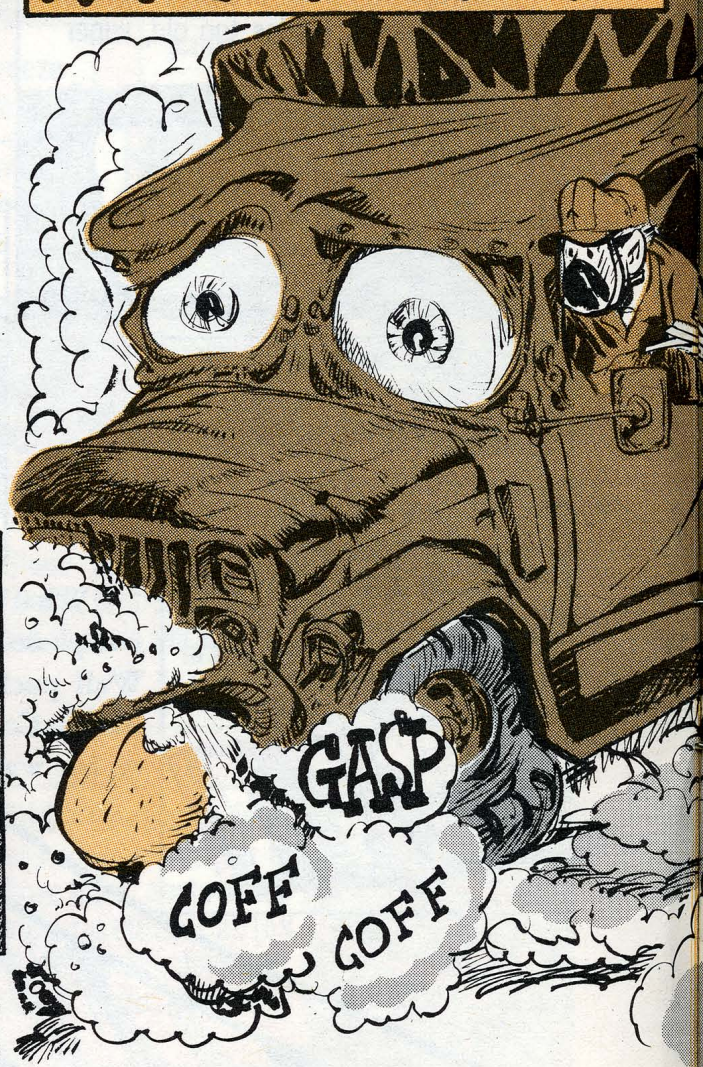


So everybody already knows that, huh?

Then how come some guys try to run an engine with a dirt-choked air cleaner?

Do they think an engine can live on fuel alone? Don't they know fuel won't burn good unless it's mixed with enough air? Can't they see that a heckuva lot of air has to pour through that engine air cleaner?





So why not just get that air cleaner out of the way? Wow — no good! Dirt's

ENGINE AIR CLEANERS...

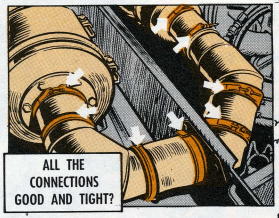
STARVATION DIET

You can't even light a match without air. To burn 'most anything, you've got to feed it air. Like oxygen, man!

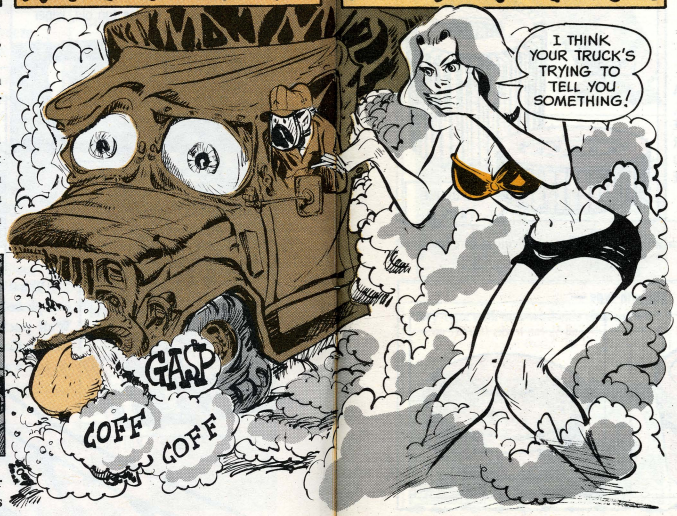
So everybody already knows that, huh?

Then how come some guys try to run an engine with a dirt-choked air cleaner?

Do they think an engine can live on fuel alone? Don't they know fuel won't burn good unless it's mixed with enough air? Can't they see that a heckuva lot of air has to pour through that engine air cleaner?



So why not just get that air cleaner out of the way? Wow — no good! Dirt's murder inside your engine! Fact is, you've got to watch close to see that all tubes and other hookups between your air cleaner and the engine are air tight. Even a little hole the size of a pencil lead will let in enough dirt to tear up the shiny bearing surfaces in there.



If your engine's got no poop, if it's sluggish on pickup and hill climbing, there's a good chance your filter element's plugged up with dirt.

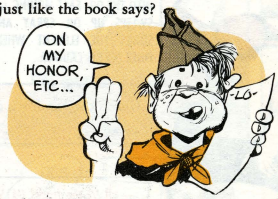
Your engine's starving for air!

You've waited too long already. Your air cleaner's long overdue for a cleaning.

HOW OFTEN? ENOUGH!

If you're on the ball, your engine never has to suffer from air starvation. Your TM or LO, or both; tells you how often to service your engine air cleaner.

Oh, so you're with it? You do give your air cleaner a regular goin' over just like the book says?



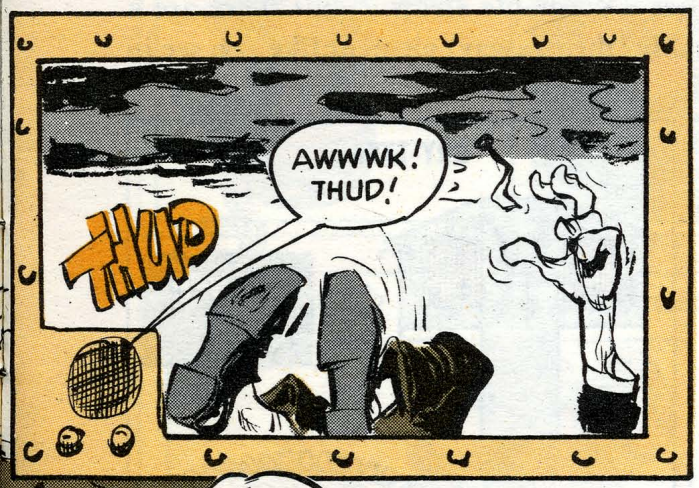
That's good — but maybe not good enough.

When you can see, feel and taste dirt in the air, you know you've got to take care of your air cleaner more often. Your engine sucks in a lot of air. That means your air cleaner picks up a lot of dirt.

You may have to clean your air cleaner every day!

PS MORE

DIET



murder inside your engine! Fact is, you've got to watch close to see that all tubes and other hookups between your air cleaner and the engine are air tight. Even a little hole the size of a pencil lead will let in enough dirt to tear up the shiny bearing surfaces in there.

If your engine's got no poop, if it's sluggish on pickup and hill climbing, there's a good chance your filter element's plugged up with dirt.

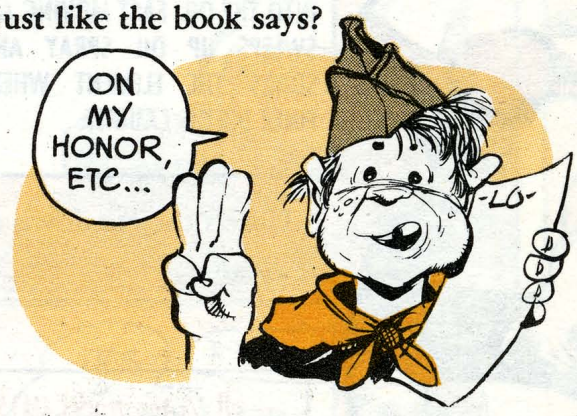
Your engine's starving for air!

You've waited too long already. Your air cleaner's long overdue for a cleaning.

HOW OFTEN? ENOUGH!

If you're on the ball, your engine never has to suffer from air starvation. Your TM or LO, or both; tells you how often to service your engine air cleaner.

Oh, so you're with it? You do give your air cleaner a regular goin' over just like the book says?



That's good — but maybe not good enough.

When you can see, feel and taste dirt in the air, you know you've got to take care of your air cleaner more often. Your engine sucks in a lot of air. That means your air cleaner picks up a lot of dirt.

You may have to clean your air cleaner every day!

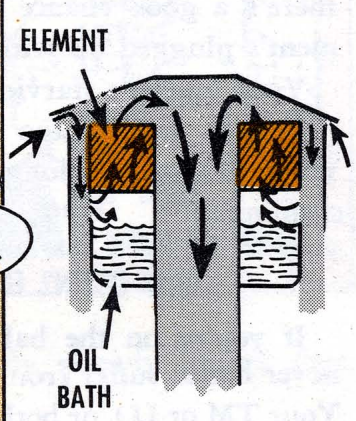
PS MORE

WHAT'S YOURS?

Let's take it from the top . . . start fresh. Let's make you the air cleaner expert in your outfit.

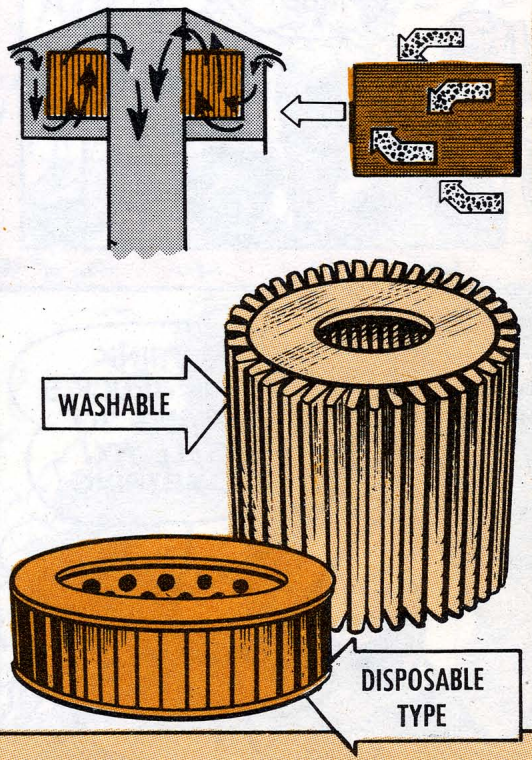
First off, your truck's got either an oil bath-type air cleaner or a dry-type air cleaner. Chances are, your dry-type job has a washable element, but there are a few air cleaners around with a non-washable (throwaway) element like you see in most late-model civilian vehicles.

OIL BATH TYPE



WHEN INCOMING AIR MAKES A SHARP TURN OVER THE OIL, BIGGER CHUNKS OF DIRT DIVE INTO THE OIL. FAST MOVING AIR SWEEPS UP OIL SPRAY AND SOAKS THE ELEMENT WHERE FINER DIRT IS CAUGHT.

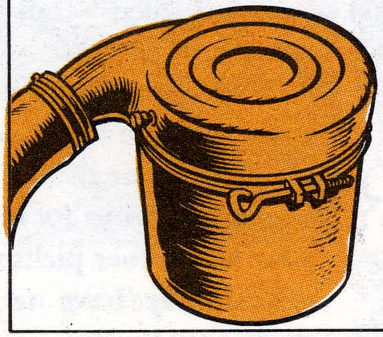
DRY-TYPE



Here's the rundown on what's got what—check it out for your air cleaner:

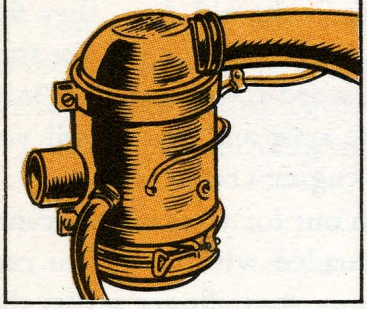
Oil bath-type —

— all 1/4-ton trucks (M151 etc.)

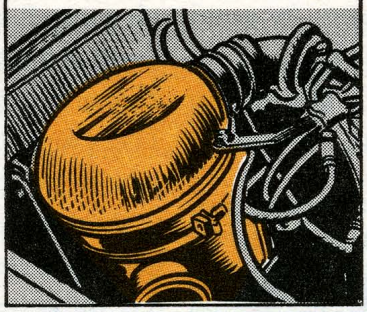


— all 3/4-ton trucks (M37B1 etc.)

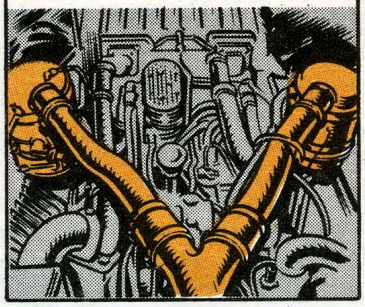
— all 2½-ton gasoline engine trucks (M35 etc.)



—all 5-ton gasoline engine trucks (M54 etc.)

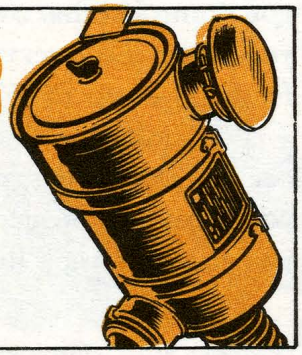


— all 10-ton gasoline engine trucks (M125 etc.) — 2 filters

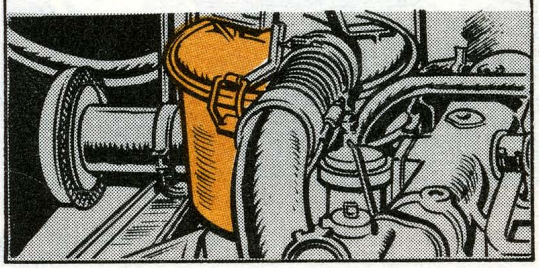


Dry-type with washable element —

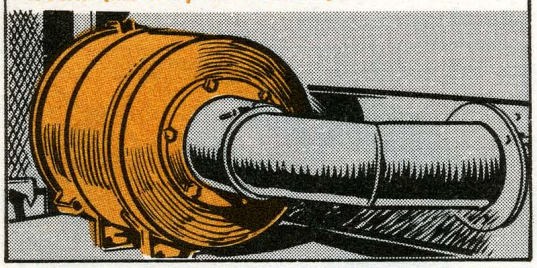
— newer 1¼-ton trucks (M715 etc.) with engine speed governor



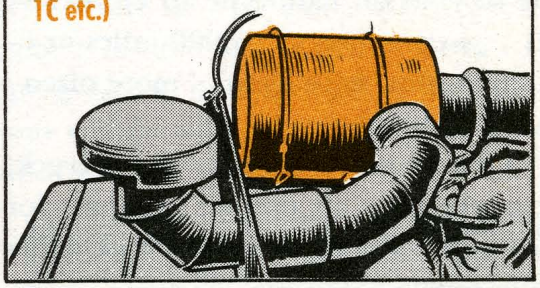
— all 2½-ton multifuel engine trucks (M35A1, M35A2 etc.)



— all 5-ton diesel and multifuel engine trucks (M54A1, M54A2 etc.)

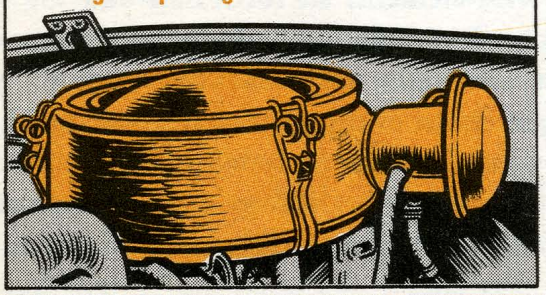


— all 10-ton diesel engine trucks (M123A-1C etc.)



Dry-type with non-washable element —

— older 1¼-ton trucks (M715 etc.) without engine speed governor.



P.S MORE

OIL BATH AIR CLEANER

There's nothing tough about keeping your oil bath-type air cleaner in good shape.

Make sure the oil level's always up to the mark in the reservoir. Add oil if it's needed.

But never put used oil in your air cleaner. Back in the old days, they figured old crankcase oil was OK for this, but now the word is — Fresh Oil Only. Use the same type and weight oil you put in your engine crankcase.

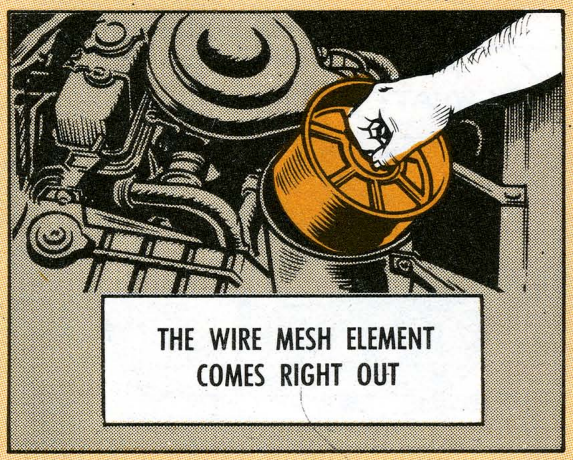
And watch out for your oil reservoir getting overloaded with dirt. You can tell by running your finger across the bottom of the reservoir. If you feel gritty dirt or thick muck on the bottom, you dump out that overloaded oil. Then you clean the reservoir and refill with fresh oil — up to the mark.

You pull this dump-clean-refill job every 1,000-miles-or-6-months, but you'll find it's needed more often when you're operating a lot in dusty country.

ALL THE WAY

Your LO calls for a full-scale cleaning of your oil bath-type air cleaner — all parts — every 6,000-miles-or-6-months. But, here again, "more often" may be needed.

If you've got a ¼-ton or ¾-ton truck, you take your air cleaner all apart for cleaning—the wire mesh element comes right out.



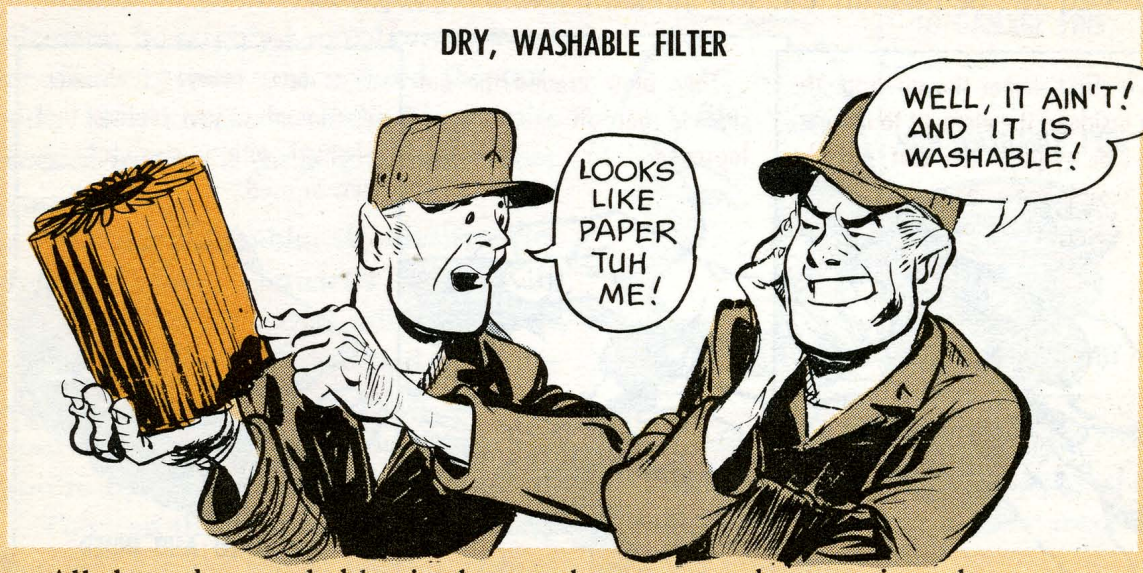
On other trucks—2½-ton, 5-ton and 10-ton — the element's built into the air cleaner body.

But you clean 'em all pretty much the same way. Let the element (or body-with-element) sit for a half-hour or so in dry cleaning solvent or mineral spirits paint thinner. Then slosh it up 'n' down in the solvent to rinse out the dirt. Give the body-with-element a reverse flush by lifting it out of the solvent and letting the stuff run out the inlet end.

Keep up this soaking 'n' sloshing until the wire mesh is clean. Then let 'er drain dry. Or, with the separate element, you can hurry up the drying job with compressed air.

You clean the reservoir and other air cleaner parts with the same kind of solvent. Use a rag or brush to get off stubborn stuff. Then wipe all parts dry with a clean cloth before putting the whole works back together.

And you fill the reservoir with fresh oil — right up to the mark.

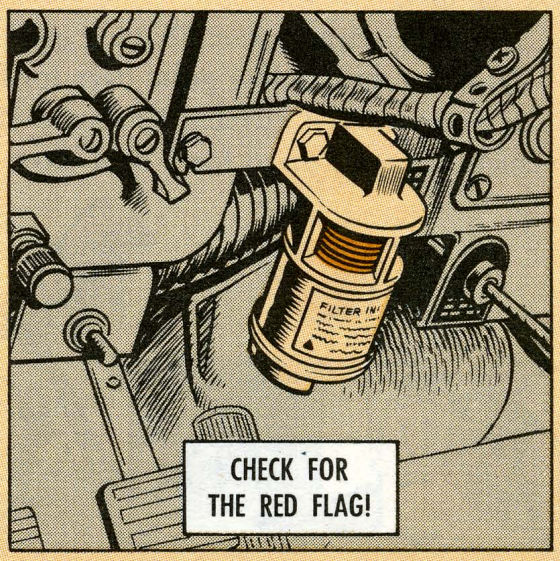


All those dry, washable air cleaner elements are the same in at least one way — they're washable. You may think it's made of paper inside, but it's not. It's a tough fabric — synthetic so water doesn't hurt it. You can wash it over 'n' over. It'll last a long time if you don't bang it around and punch holes in it.

This kind of element is great for trapping dirt. It does this job so well that it can plug up solid — if you let it — and your engine will get no air at all. How'd you like your nose 'n' mouth jammed full of dirt?

There're 3 ways of cleaning your dry, washable element — good, better and best.

Just slapping the dirt out is better than nothing when you're out in the field or on the road. That red flag locked up in your truck's air filter indicator means your engine's already suffering from air starvation. So you yank that filter element and get the dirt out. Slap it around the sides. Bump the ends — gently — against the truck or on the ground. And shake it hard so the dirt'll fall out.



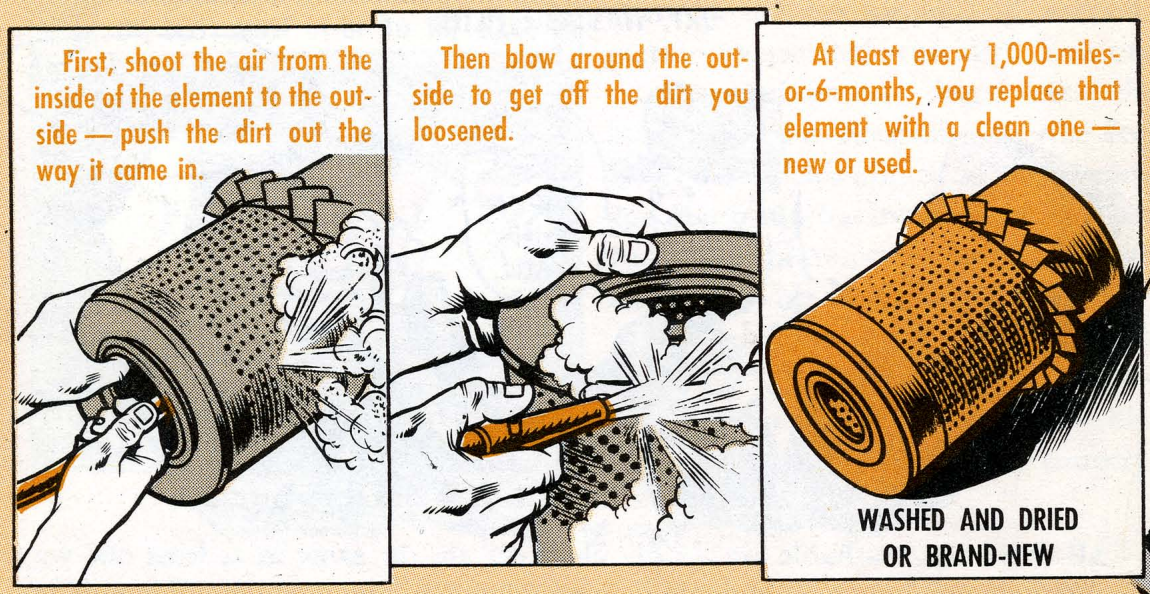
P.S MORE

Natch, you never have your engine running while the filter element's out—or you'll suck dirt into the engine like mad!

While you've got the element out for cleaning, wipe out the air cleaner housing with a clean cloth to catch any dirt layin' around in there.

Remember to hit the reset button on the air filter indicator so the red flag'll drop back down.

Back at the motor park, give your filter element a better cleaning with compressed air. Be careful! Use low pressure and wear goggles.



"Replace" does not mean you throw your old one away—unless your inspection shows it's torn or has holes poked in it.

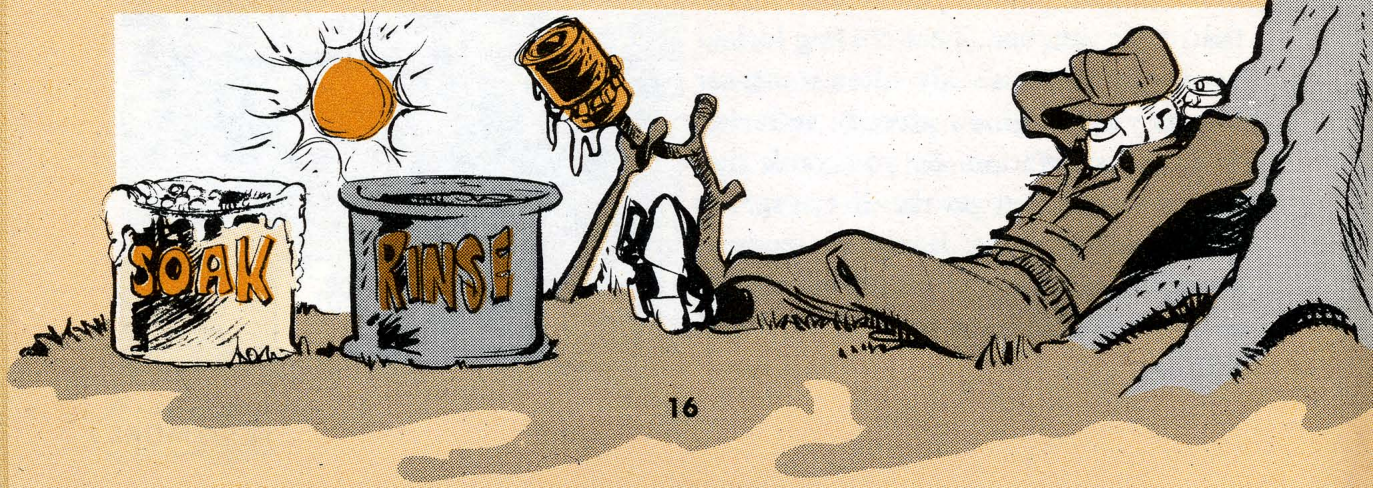
Give your dirty element a bath—warm water and detergent in a tub or big bucket. Never use gasoline or other solvent on this kind of air cleaner element.

Let 'er soak for 5-10 minutes to loosen the dirt. Then slosh it around to wash off the dirt.

Rinse it in clean water. Shake it good to get out most of the water.

Give it another close goin' over for holes or other damage.

If your washed element's in good shape, it can go back to work in another vehicle after it's dried for 3 or 4 days.



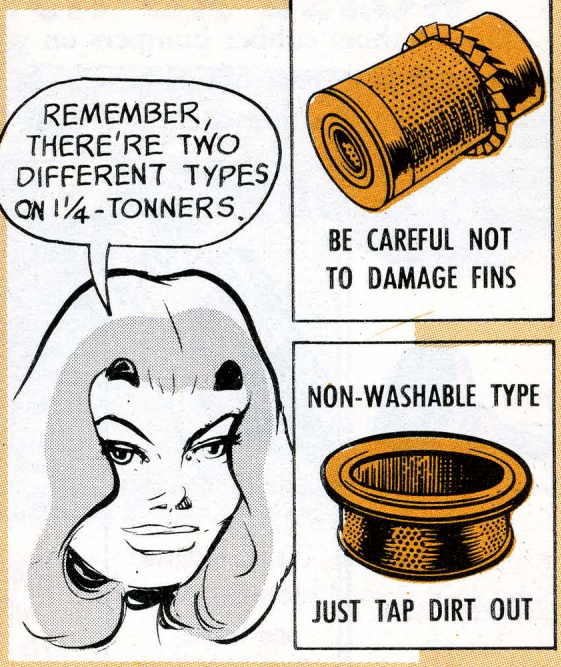
2 KINDS IN 5-QUARTER

If your M715 or other 1¼-ton vehicle has the dry, washable air cleaner element, you give it the same treatment. But you "replace" the element with a washed or new element at 3,000 miles.

Whenever you're handling this filter element, be mighty careful not to bend or damage those fins around the outside. They knock down the bigger dirt sucked in so it'll drop into that rubber vacuator valve.

The non-washable air cleaner element on older 5-quarter vehicles is usually good for 3,000 miles, too, but you replace it with a brand-new element. It's a good idea, though, to clean your element in between changes when you're operating in dusty country.

To clean this non-washable element, you just rap the top or bottom against a flat surface to knock out the dirt. Not too hard, though, or you'll damage the gaskets — this'll let dirt slip by around the filter element.



PARTS AND SUPPLIES

Here're some of the things you need for pulling your air cleaner PM:

Dry, washable filter element —

— for 1¼-ton trucks (newer model), FSN 2940-135-6531, in Ch 1 (May 70), TM 9-2320-244-20P

— for 2½-ton multifuel trucks, FSN 2940-804-7898, in TM 9-2320-209-20P (Jan 65)

— for 5-ton diesel and multifuel trucks, FSN 2940-974-9669, in TM 9-2320-211-20P (Mar 63) and Ch 1 (Sep 64)

— for 10-ton diesel trucks, FSN 2940-902-5553, in Ch 2 (Mar 70), TM 9-2320-206-20P

Dry, non-washable filter element —

— for 1¼-ton trucks (older model), FSN 2940-875-9000, in Ch 1 (May 70), TM 9-2320-244-20P

for your PM

Cleaning supplies — Listed in such places as SB 38-100 (Jul 70) and in the O&M Supplies section of Ch 3 (Jun 67), TM 9-2320-209-10. Also, check your self-service supply store, since these items are available through GSA —

— Drycleaning solvent, FSN 6850-281-1985 (1-gal), FSN 6850-285-8012 (55-gal)

— Mineral spirits paint thinner, FSN 8010-242-2089 (1-gal), FSN 8010-558-7026 (5-gal), FSN 8010-246-6116 (55-gal)

— Detergent (liquid), FSN 7930-282-9699 (1-gal), FSN 7930-985-6911 (5-gal).

PS END

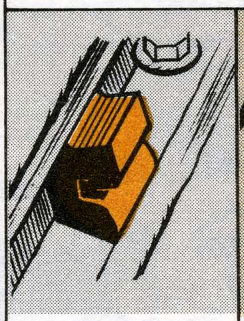
M715 BUMPER CROP

One of those rubber bumpers on your 1¼-ton truck can be ordered under regular FSN — four others have to be ordered by exception data using the part number and Routing Identifier Code B24.

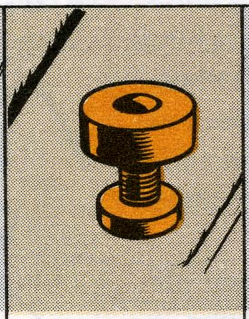
This one can be ordered by FSN 5340-792-8125

Radiator shroud bumper

These have to be ordered by exception data.

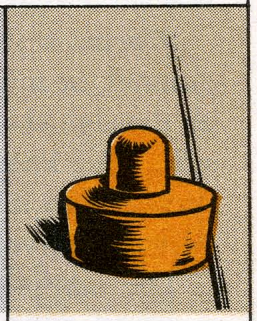


Hood bumper, between hood and fender P/N 11657838



Hood bumper with screw P/N 11662555

Tailgate bumper P/N 11640798



Cowledge (rear) P/N 11657222

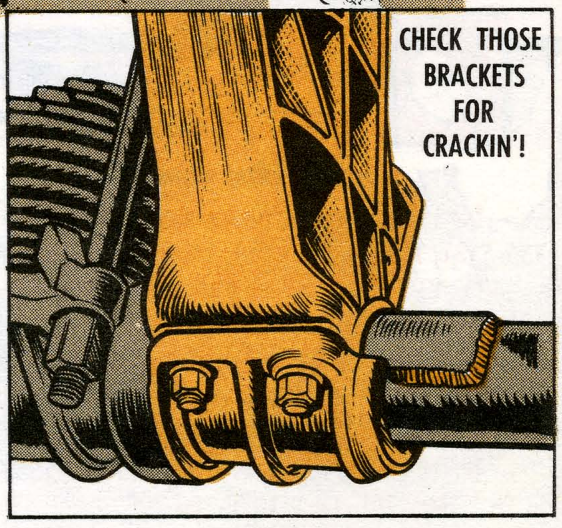
M123A1C 10-TON JOLTS...

NEW TRUNNION AND BOLTS

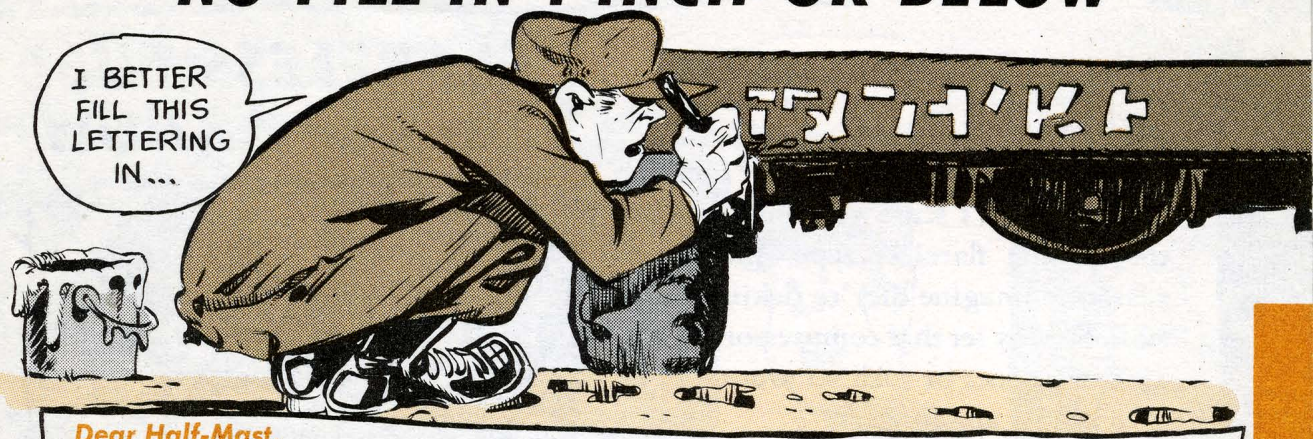
You'd better keep a close eye on those rear trunnion brackets if your M123A-1C 10-ton truck-tractor has the old type. They may be crackin' on you.

Uh, oh — they are? Then get support to replace 'em with the new thicker job —FSN 2510-178-1047 for each bracket. They'll use longer, stronger bolts P/N 11619844; nuts, P/N MS-51943-46; and washers, P/N 7700146.

Then it's up to you to keep 'em snug — 250 to 300 ft-lb torque.



NO FILL IN 1-INCH OR BELOW



Dear Half-Mast,

When applying 1-in and smaller stencils on vehicles, is it necessary to fill in the lettering? AR 746-1 (Aug 70) and TB 746-93-1 do not mention this little detail.

Filling in these small markings does not improve the appearance of the equipment, nor does it make the markings easier to read. Plus, it's a loss of mechanic's time which should be used maintaining the equipment.

MSG J. D. R.

Dear Sergeant J. D. R.

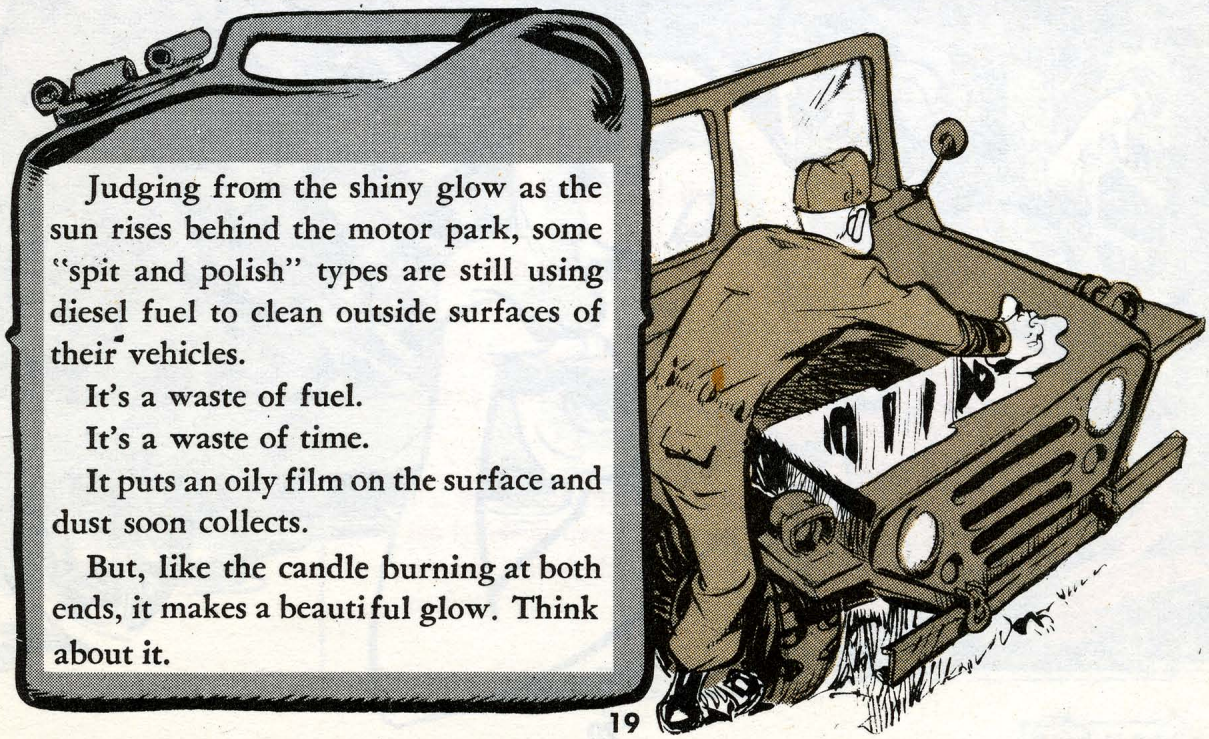
Right on! The people who wrote the AR's didn't intend for 1-in and smaller stencils to be filled in.

Half-Mast

TIP-70

LETTERS 1 INCH OR LESS? NO NEED TO CONNECT STENCIL BREAKS

DIESEL'S NOT FOR CLEANING



Judging from the shiny glow as the sun rises behind the motor park, some "spit and polish" types are still using diesel fuel to clean outside surfaces of their vehicles.

It's a waste of fuel.

It's a waste of time.

It puts an oily film on the surface and dust soon collects.

But, like the candle burning at both ends, it makes a beautiful glow. Think about it.

HYDRAULIC OR FUEL LINES PFFFFT . . . ING?

FLARELESS TUBE KNOW-

Leaky joints on hydraulic or fuel line tubing needn't scare you. Just because they're the flareless type, there's no reason to imagine they're ticklish to install. So why let that compressor, pump, air conditioner or such set around in its own piddle any longer?

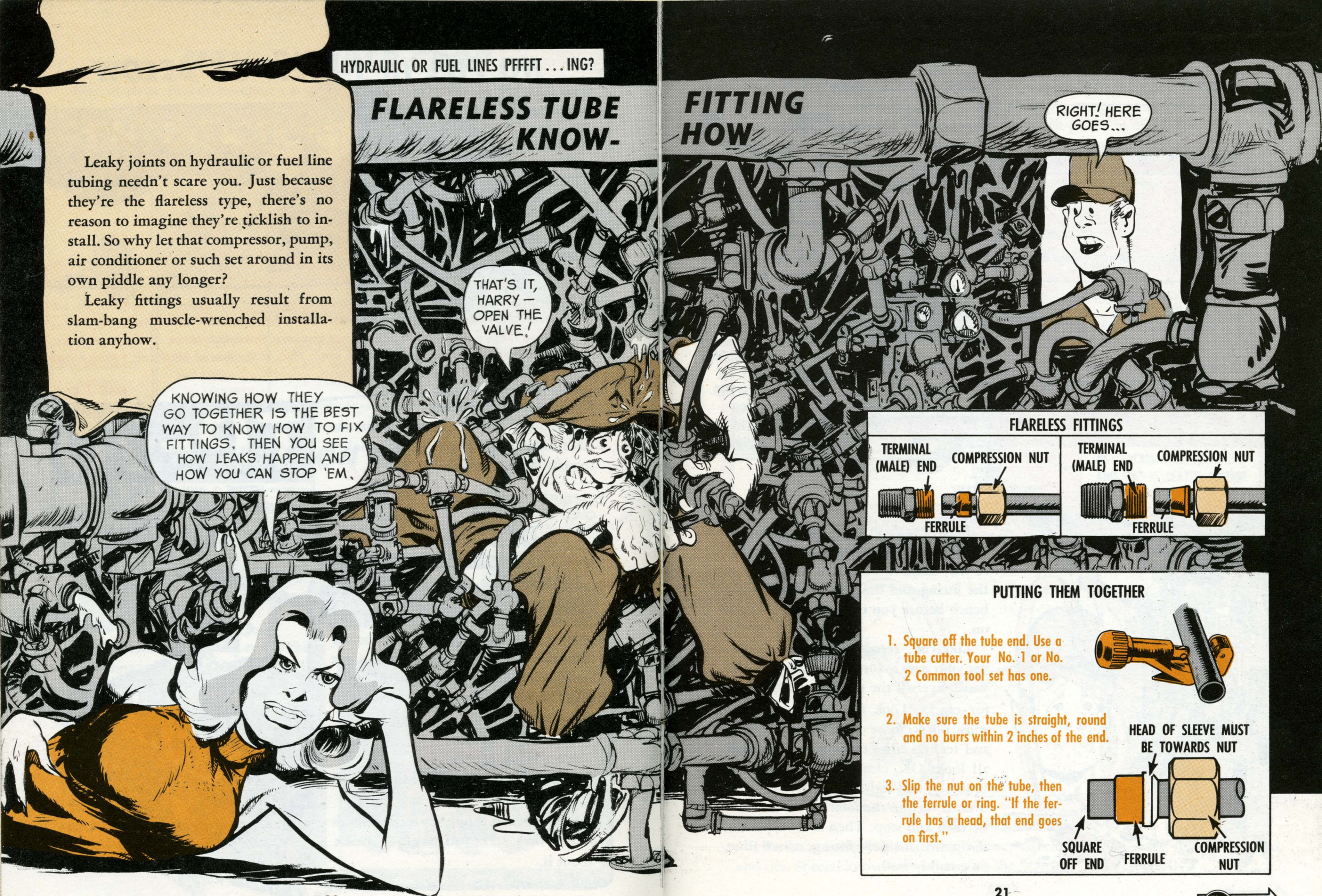
Leaky fittings usually result from slam-bang muscle-wrenched installation anyhow.

HYDRAULIC OR FUEL LINES PFFFFT . . . ING?

FLARELESS TUBE FITTING KNOW-HOW

Leaky joints on hydraulic or fuel line tubing needn't scare you. Just because they're the flareless type, there's no reason to imagine they're ticklish to install. So why let that compressor, pump, air conditioner or such set around in its own piddle any longer?

Leaky fittings usually result from slam-bang muscle-wrenched installation anyhow.



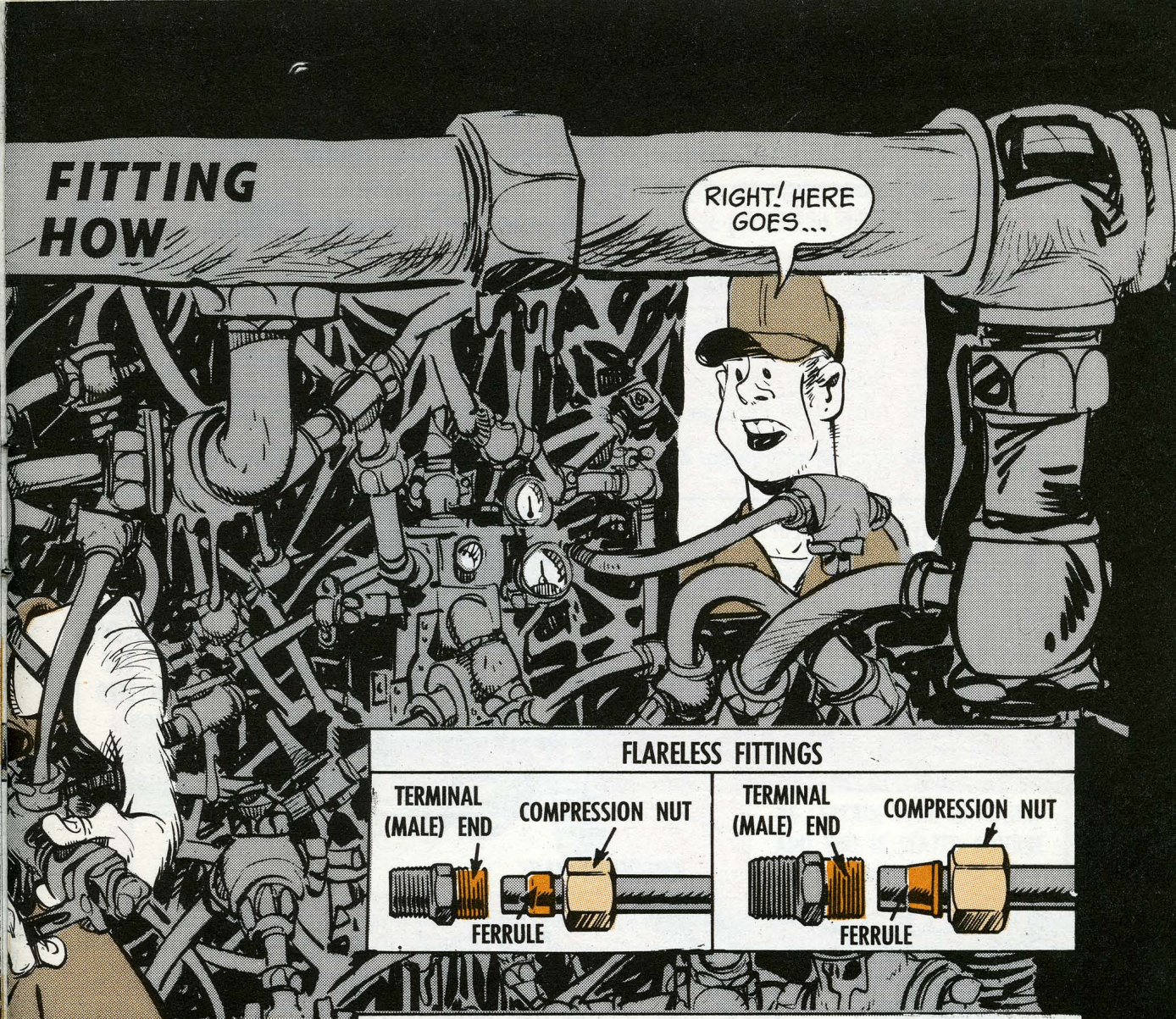
FLARELESS FITTINGS

PUTTING THEM TOGETHER

1. Square off the tube end. Use a tube cutter. Your No. 1 or No. 2 Common tool set has one.
2. Make sure the tube is straight, round and no burrs within 2 inches of the end.
3. Slip the nut on the tube, then the ferrule or ring. "If the ferrule has a head, that end goes on first."

P.S. MORE

FITTING HOW



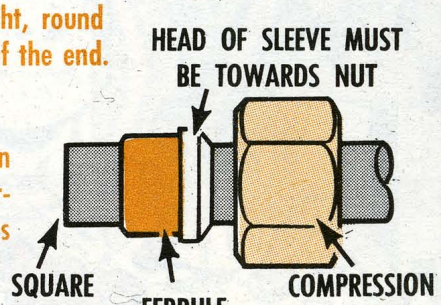
FLARELESS FITTINGS

PUTTING THEM TOGETHER

1. Square off the tube end. Use a tube cutter. Your No. 1 or No. 2 Common tool set has one.

2. Make sure the tube is straight, round and no burrs within 2 inches of the end.

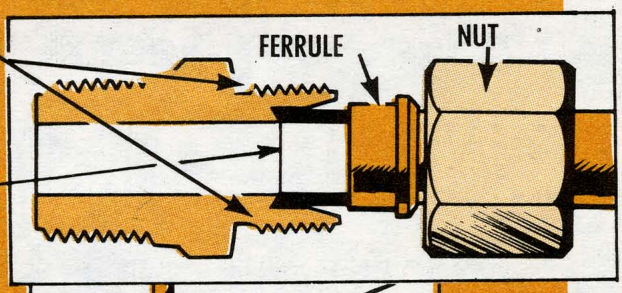
3. Slip the nut on the tube, then the ferrule or ring. "If the ferrule has a head, that end goes on first."



P.S MORE

4. Dab some lube on the tube end and fitting threads.

5. Seat the tube, straight and square, into the male fitting.

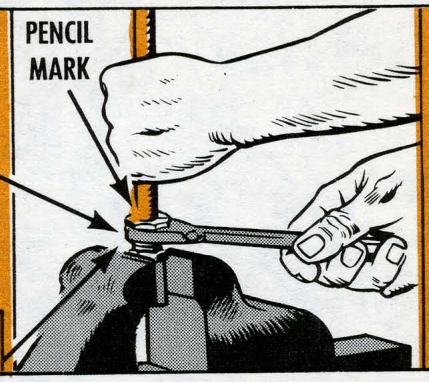


6. Run down the nut, thread it up, and tighten it slowly with a wrench.

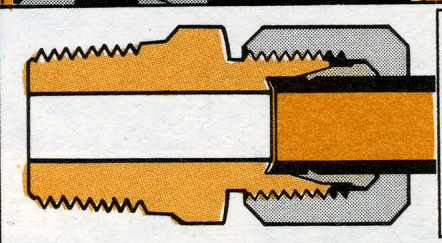
7. While tightening, rotate tube back and forth until you feel the ring grip it. Tighten until you can't turn or jiggle tube with fingers.

8. Pencil-mark or scratch position of nut on tube.

9. Using just the right-size wrench — never grip pliers — tighten the nut another 1¼ to 1½ turns—no more. The scratch mark is your guide.

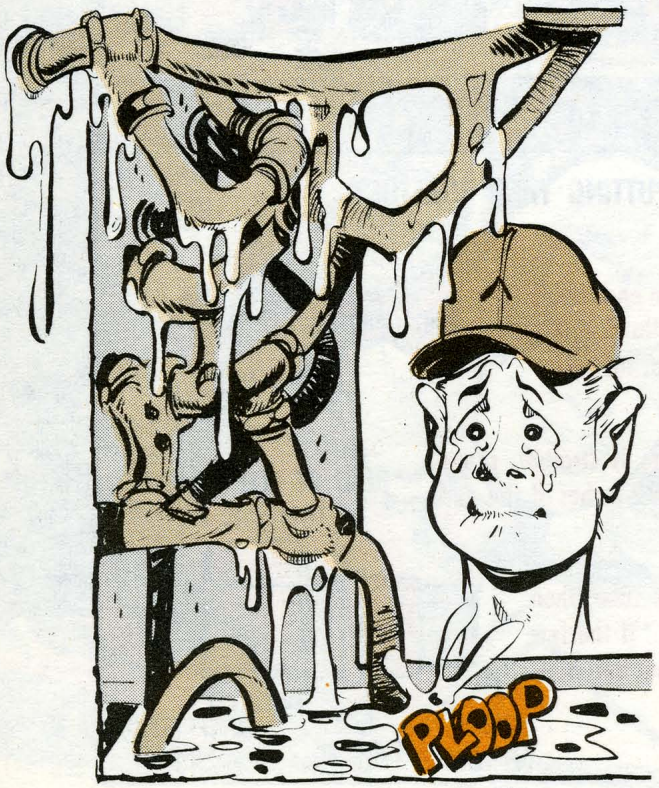


DO NOT SET VISE JAWS TOO TIGHT!



THIS IS THE WAY THE COMPLETED JOB SHOULD LOOK

CHECKING PAYS



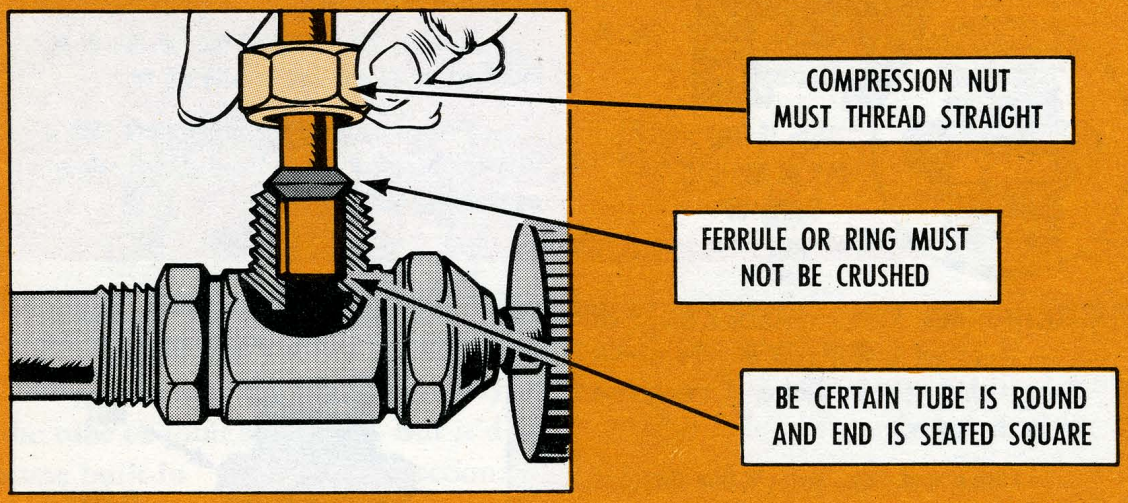
Now, check to make sure you have no leaks. It's never good to just guess. It will help, in fact, if you check over the fitting and the tube on your workbench before you even begin putting it on.

Likewise, repair goes better if you use your eyes before you touch the hardware. Eyeball the nut and the tube seat for cracks. Look for egg-shaped tube ends, burrs, loose or deformed seating, and ferrule rings cutting tube sides. If all looks OK, clean and reseat tubing squarely, and tighten up the nut. Turn it until torque rises sharply, then ⅛ to ¼ turn and stop. Then if it still leaks, the word is a new fitting, a new line, or possibly both.

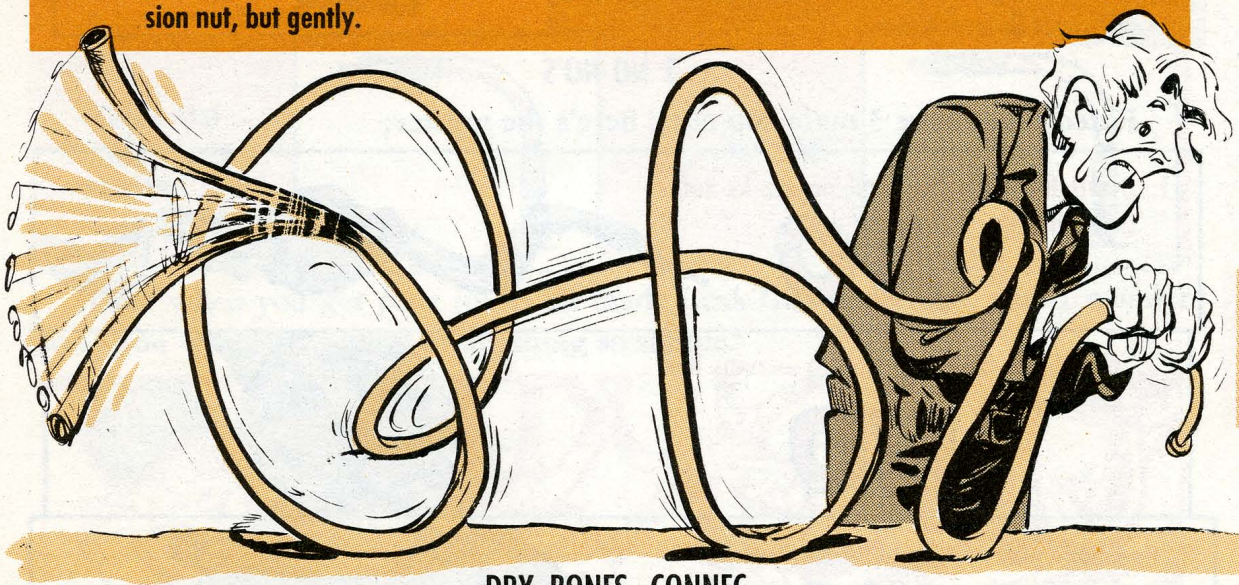
MAKING REPLACEMENTS

If the tube would be too short when cut to take a new fitting, or if the old tube has just had it, replace. You'll be in luck if supply can get you preformed tubing cut to fit. But if not, use bulk stock, and keep these points in mind:

1. Always replace with the same type tubing. Never substitute copper or brass line for steel.
2. Shape the tube before putting on connections. Use the old line as a pattern.
3. Cut only with a tube cutter, not hacksaw or file.
4. Make new tube 1/8 inch to 1/4 inch longer than the old one.
5. Be certain ends are seated square, tube is round, and compression nut is on threads straight.



6. Hold tubing in hands. Use forming tool, if you have one, to bend and shape it by hand. Vise jaws or grip pliers will kink it, crush it, or deform it. You can use a vise to hold the compression nut, but gently.

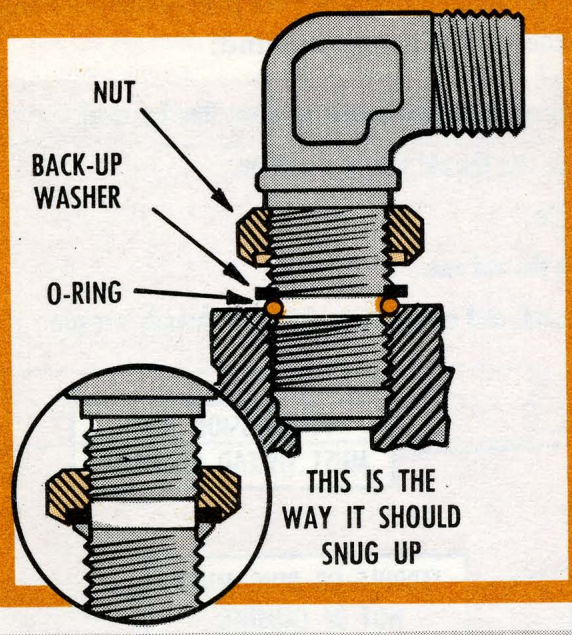


DRY BONES, CONNEC—

Like knee-bones joined to thigh bone, flareless fittings have follow-on links and ties. Special know-how helps with the "O-ring" kind especially.

P.S MORE

POSITIONING TYPE— This kind has to face a certain way or point to another joint.



— Run the lock nut back all the way up on its threads to clear the recess.

— Fit the back-up washer into the recess.

— Lube the O-ring and slip it right under the back-up washer.

— Then screw the fitting in the boss until the O-ring just touches.

— Position the fitting; it can be run in or loosened up to one full turn to do so.

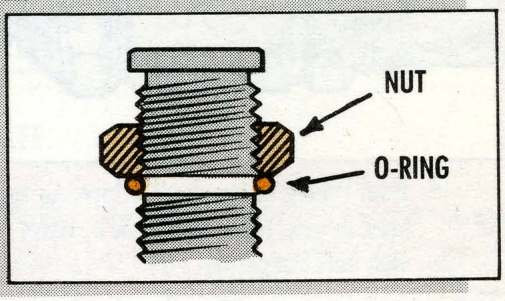
— Wrap it up, hold the fitting neck with a wrench, then rack the lock nut securely down against the boss.

NON-POSITIONING TYPE, without fixed direction.

— These get a thin skin of lube on the O-ring, which is then seated in the groove under the hex nut.

— Fitting and boss, straight-line matched, are finger tightened.

— Setting is easy: open-end wrench to snug fit, 50 ft-lb torque max.



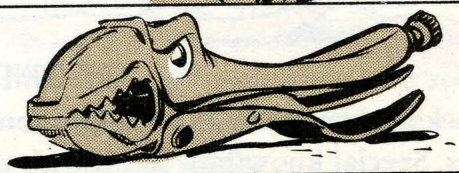
3 NO-NO'S

Fitted tubes have 3 main cop-outs; here's the muster:

1. Overtightening—twists tubing, cracks nut, strips threads. **NO**

2. Wrong-size open-end wrench — ruins hex nut shoulders. **NO**

3. Grip-type pliers — crush tubing, nut, or even base casting. **NO**



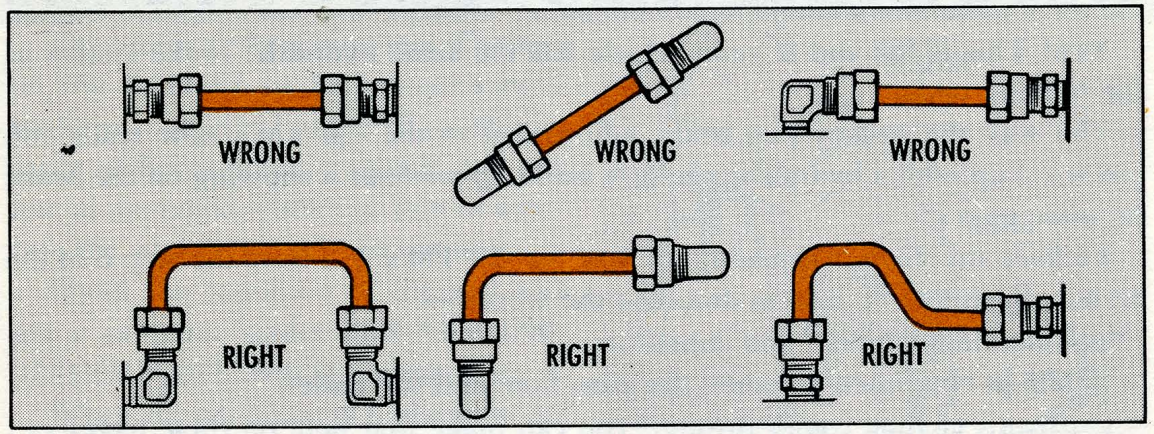
IT TAKES TIME

Another great idea is, don't rush too much. When you find a leak, track down the cause if you can.

For instance, ask yourself whether the fitting was put together wrong in the first place, or if the tube wasn't shaped right to begin with.

One main thing to remember is, you hardly ever want tubing to run straight from joint to joint with no loop or allowance for stretch.

Here's the right and wrong way to install tubing:

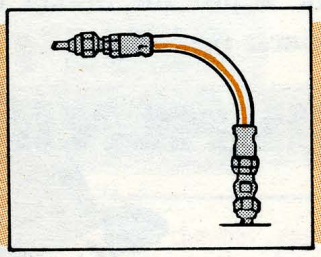


Rigid lines don't stand up to vibration well, for one thing.

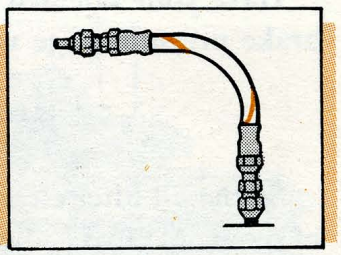
If you dropped a wrench on any of the lines at top, you'd more'n likely snap the tube or joint smack off. But it'd take a harder lick on those below . . . there's some built-in "give" for protection.

And finally, when you tighten, avoid twisting the tubing. Imagine you'd drawn a line down the tube with a grease pencil.

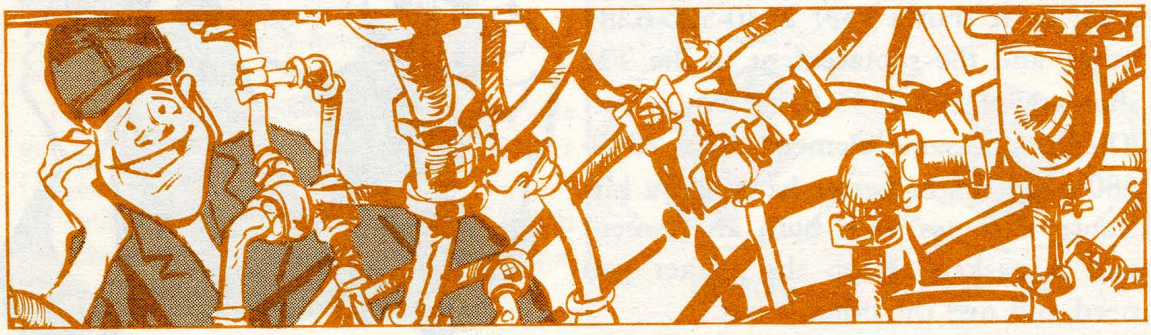
COLOR LINE WOULD LOOK LIKE THIS . . .



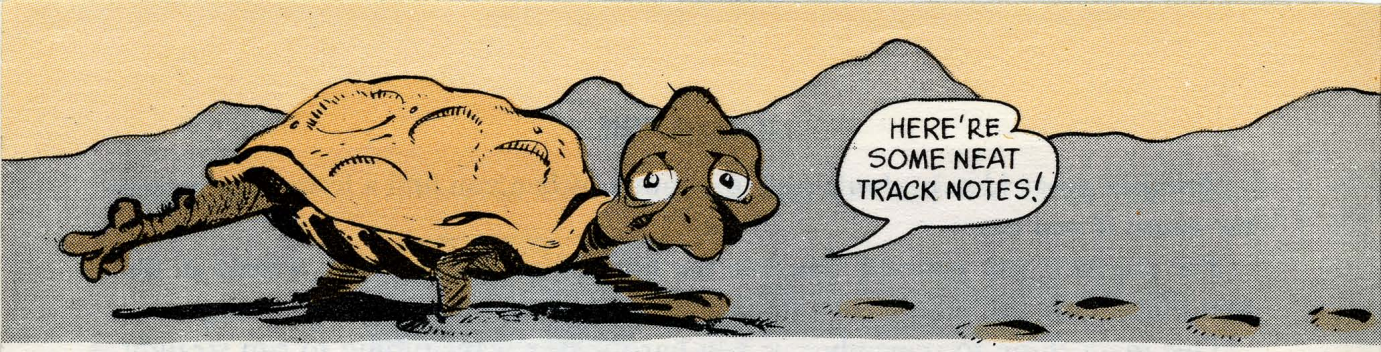
. . . NOT THIS



Then when you get your joints all made, leak-free and clean, you'll wonder why you were ever scared of anything so simple.



PS END



M60A1 TANK, M60A1 LAUNCHER, M48A3 TANK, M728 CEV

TANK HYDRAULIC BRAKE CHANGE

Yep! This is for you if your vehicle has the same hydraulic brake system as the M60A1 tank.

The way the step-by-step brake adjustment in the -20 TM's now reads you can wind up with a hydraulic pressure build-up without it showing on the brake pressure gage.

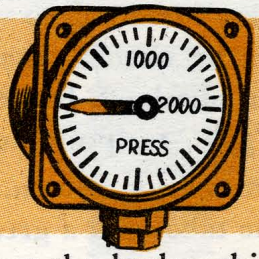
To keep this from happening all 4 of the -20 TM's will have the Step 6 of the brake adjustment revised to drop out the words —

"contact brake lever" and substitute —

".020-in clearance between the cam face and the roller."

Until this change comes through you can make that note on these pages . . .

Vehicle	Technical Manual	Page
M60A1 Tank	TM 9-2350-215-20	2-310
M48A3 Tank	TM 9-2350-224-20	2-294.1
M728 CEV	TM 9-2350-222-20	2-303
M60A1 Launcher	TM 5-5420-202-20	6-86

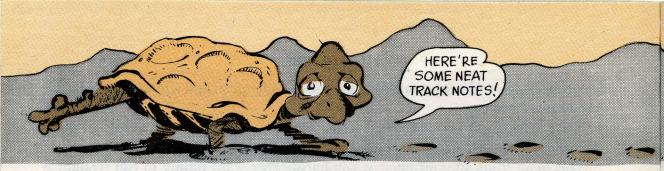


THIS'LL KEEP YOUR BRAKE PRESSURE GAGE HONEST

Have your talented company mechanic adjust the brakes this way, and the brake pressure gage will give you an honest reading.

M113A1 OIL FILTER

So the oil filter element you took out of your M113A1 diesel-series carrier has a different FSN than the element listed in TM 9-2300-257-20P (Mar 69). That is, it shows FSN 2940-580-6283 on it, and the replacement in the TM shows FSN 2940-555-6348. No sweat! They're the same element. FSN 2940-580-6283 might better be called a kit, 'cause it comes with both an element and 3 gaskets. Keep the gasket you need and toss the other 2 out.



M60A1 TANK, M60A1 LAUNCHER, M48A3 TANK, M728 CEV

TANK HYDRAULIC BRAKE CHANGE

Yep! This is for you if your vehicle has the same hydraulic brake system as the M60A1 tank.

The way the step-by-step brake adjustment in the -20 TM's now reads you can wind up with a hydraulic pressure build-up without it showing on the brake pressure gage.

To keep this from happening all 4 of the -20 TM's will have the Step 6 of the brake adjustment revised to drop out the words —

"contact brake lever" and substitute —

".020-in clearance between the cam face and the roller."

Until this change comes through you can make that note on these pages . . .

Vehicle	Technical Manual	Page
M60A1 Tank	TM 9-2350-215-20	2-310
M48A3 Tank	TM 9-2350-224-20	2-294.1
M728 CEV	TM 9-2350-222-20	2-303
M60A1 Launcher	TM 5-5420-202-20	6-86

THIS'LL KEEP YOUR BRAKE PRESSURE GAGE HONEST

Have your talented company mechanic adjust the brakes this way, and the brake pressure gage will give you an honest reading.

M113A1 OIL FILTER

So the oil filter element you took out of your M113A1 diesel-series carrier has a different FSN than the element listed in TM 9-2300-257-20P (Mar 69). That is, it shows FSN 2940-580-6283 on it, and the replacement in the TM shows FSN 2940-555-6348. No sweat! They're the same element. FSN 2940-580-6283 might better be called a kit, 'cause it comes with both an element and 3 gaskets. Keep the gasket you need and toss the other 2 out.

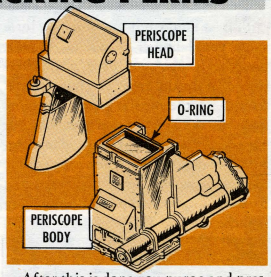
M551 SHERIDAN —

PERISCOPE PACKING PERILS

The preformed packing seal (O-ring) on the XM44E1 or E2 gunner's periscope in your M551 armored reconnaissance airborne assault vehicle can get lost or damaged when you join or separate the periscope body and mount.

Check the condition of the seal and get a new one under FSN 5330-690-9741 (MS 9021-259) if you need it.

When the periscope is replaced or repaired your turret mechanic (or DS, GS or Depot mechanic) will smear MIL-A-46106 adhesive around the entire seal groove before putting the preformed packing in place. (FSN 8040-828-7385 gets a tube of the adhesive.)



After this is done you purge and pressurize the periscope per TM 9-2350-230-12 (Jun 66).

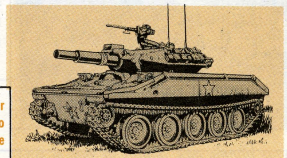
M551 LUBE LOWDOWN

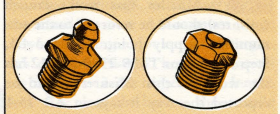
Nope! MWO 9-2350-230-30/2 changes your M551 Sheridan suspension system from oil to grease but it does not add lube fittings to the idler spindle housings.

Some of the housings have these fittings and some of them don't.

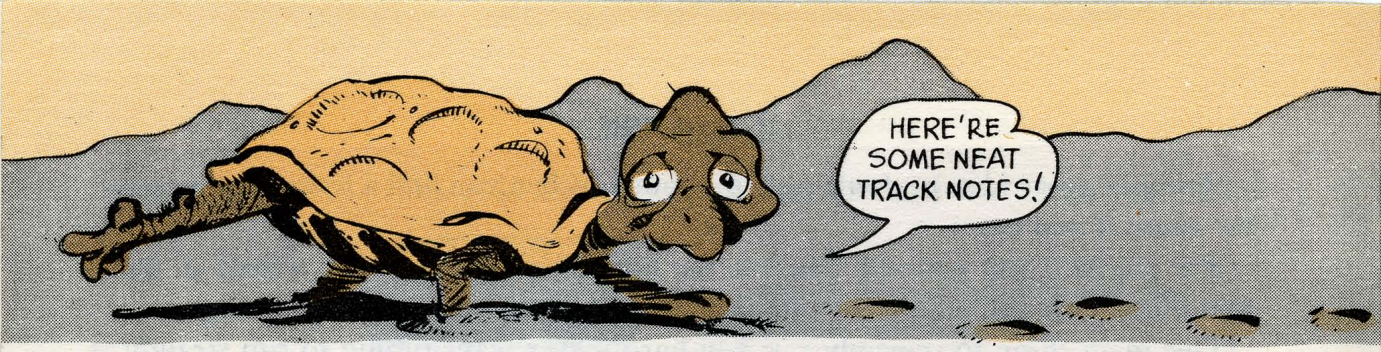
The housings with the fittings get lubed by grease gun the way it says in Ch 6 to TM 9-2350-230-12 (Jun 66) Fig 9-60.1, Pg 9-68.1.

Housings without the grease and relief fittings get lubed by hand packing during replacement or at depot overhaul.





USE THESE — IF YOU HAVE 'EM



M60A1 TANK, M60A1 LAUNCHER, M48A3 TANK, M728 CEV

TANK HYDRAULIC BRAKE CHANGE

Yep! This is for you if your vehicle has the same hydraulic brake system as the M60A1 tank.

The way the step-by-step brake adjustment in the -20 TM's now reads you can wind up with a hydraulic pressure build-up without it showing on the brake pressure gage.

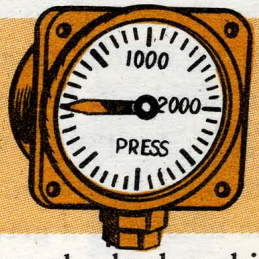
To keep this from happening all 4 of the -20 TM's will have the Step 6 of the brake adjustment revised to drop out the words —

"contact brake lever" and substitute —

".020-in clearance between the cam face and the roller."

Until this change comes through you can make that note on these pages . . .

Vehicle	Technical Manual	Page
M60A1 Tank	TM 9-2350-215-20	2-310
M48A3 Tank	TM 9-2350-224-20	2-294.1
M728 CEV	TM 9-2350-222-20	2-303
M60A1 Launcher	TM 5-5420-202-20	6-86



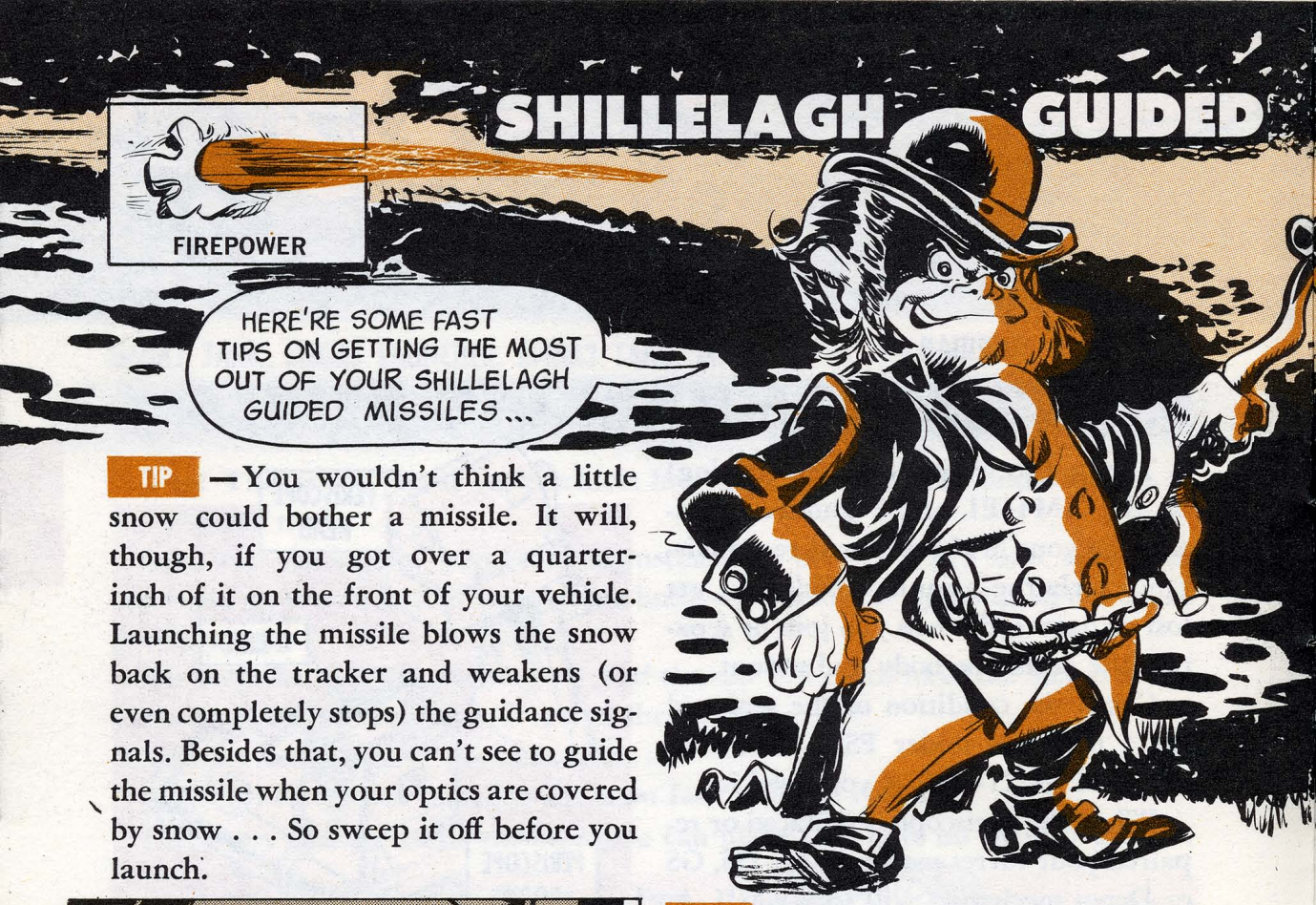
THIS'LL KEEP YOUR BRAKE PRESSURE GAGE HONEST

Have your talented company mechanic adjust the brakes this way, and the brake pressure gage will give you an honest reading.

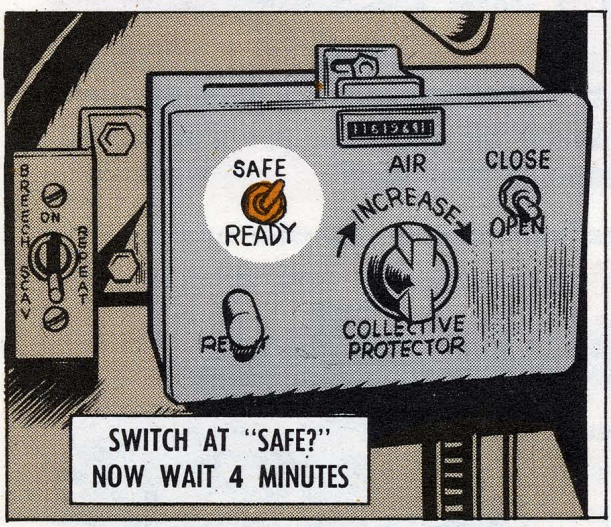
M113A1 OIL FILTER

So the oil filter element you took out of your M113A1 diesel-series carrier has a different FSN than the element listed in TM 9-2300-257-20P (Mar 69). That is, it shows FSN 2940-580-6283 on it, and the replacement in the TM shows FSN 2940-555-6348. No sweat! They're the same element. FSN 2940-580-6283 might better be called a kit, 'cause it comes with both an element and 3 gaskets. Keep the gasket you need and toss the other 2 out.

SHILLELAGH GUIDED



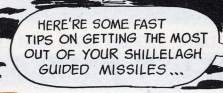
TIP —You wouldn't think a little snow could bother a missile. It will, though, if you got over a quarter-inch of it on the front of your vehicle. Launching the missile blows the snow back on the tracker and weakens (or even completely stops) the guidance signals. Besides that, you can't see to guide the missile when your optics are covered by snow . . . So sweep it off before you launch.



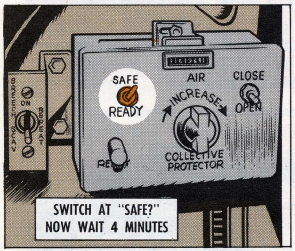
TIP —What do you do after you flip your SAFE/READY switch to the SAFE position when your missile has failed to launch for the third time? You do absolutely nothing for 4 minutes (count 'em slowly) **4 minutes** while you stay clear of the breech. This is so you'll be out of the way if the missile ignites and the gun-launcher recoils. This 4-minute limit is spelled out on page 3-6.4 (Ch 7) to your trusty TM 9-2350-230-12 (Jun 66).

TIP —Missiles that won't launch (misfires) should be returned to the ammunition supply point. Table 3-4.1, Step 34, of your TM 9-2350-230-12 has the word on this. Misfires are to be reported the way it says in AR 75-1 (Oct 69).

SHILLELAGH GUIDED MISSILE GUIDE



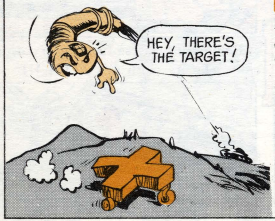
TIP —You wouldn't think a little snow could bother a missile. It will, though, if you got over a quarter-inch of it on the front of your vehicle. Launching the missile blows the snow back on the tracker and weakens (or even completely stops) the guidance signals. Besides that, you can't see to guide the missile when your optics are covered by snow . . . So sweep it off before you launch.



TIP —What do you do after you flip your SAFE/READY switch to the SAFE position when your missile has failed to launch for the third time? You do absolutely nothing for 4 minutes (count 'em slowly) **4 minutes** while you stay clear of the breech. This is so you'll be out of the way if the missile ignites and the gun-launcher recoils. This 4-minute limit is spelled out on page 3-6.4 (Ch 7) to your trusty TM 9-2350-230-12 (Jun 66).

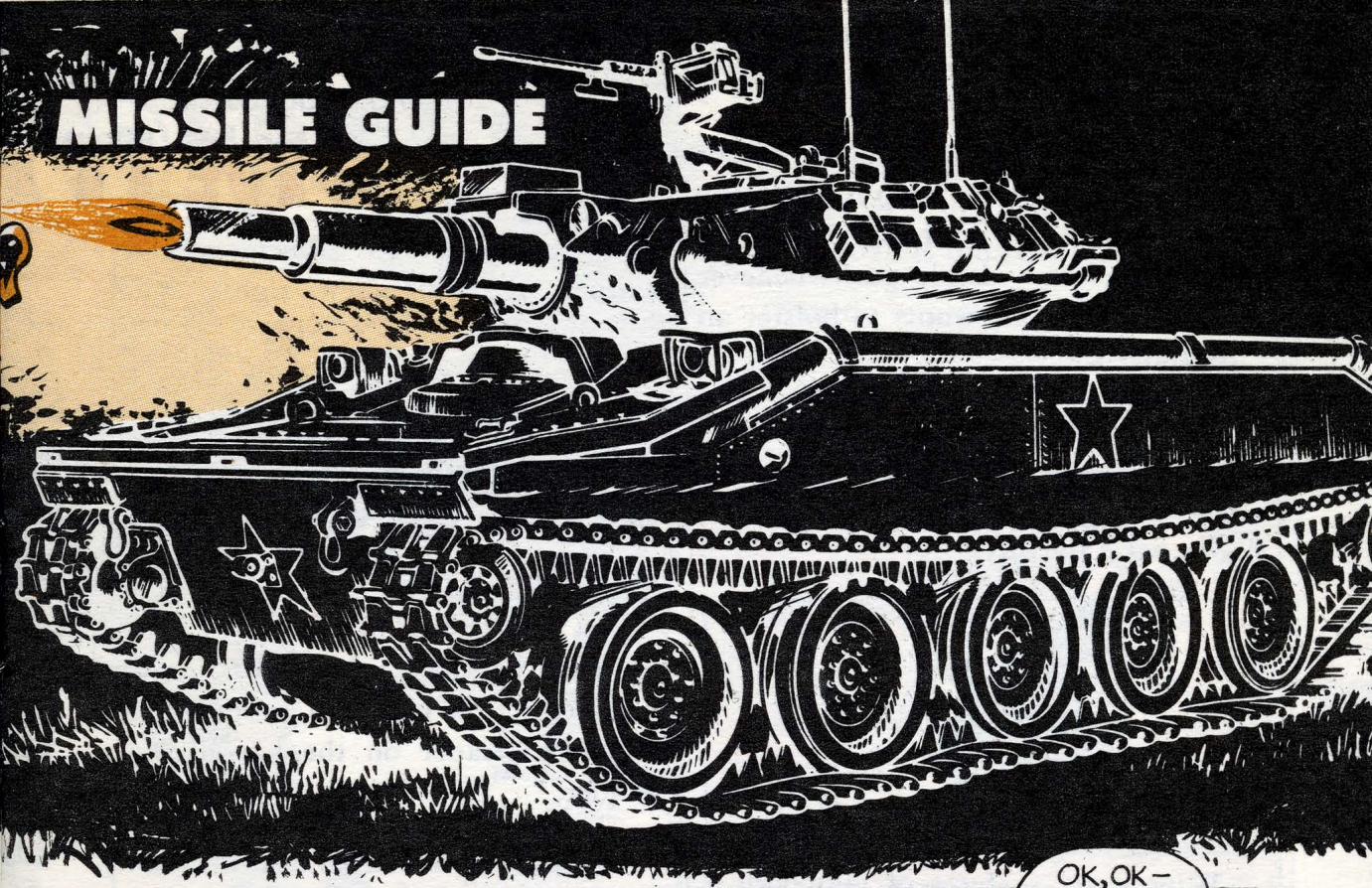
TIP —Missiles that won't launch (misfires) should be returned to the ammunition supply point. Table 3-4.1, Step 34, of your TM 9-2350-230-12 has the word on this. Misfires are to be reported the way it says in AR 75-1 (Oct 69).

TIP —On night firings smart gunners keep their eyes closed for a second or so after missile launch. That way they avoid temporary night blindness. (Later, when the newest missiles with light filters get issued, you won't have to do this because they are easy on the eyes. But for now, just shut your little peepers for a coupla seconds when you blast off a missile at night.)



TIP —The further away a Shillelagh missile gets the longer it takes to change course after you give the signal. This is easy to forget. You should remember it, though, particularly when the missile is close to maximum range or you're trying to hit a moving target. It's real important to keep the line-of-sight on or near the target center for the last few seconds before the missile impact.

MISSILE GUIDE



TIP —On night firings smart gunners keep their eyes closed for a second or so after missile launch. That way they avoid temporary night blindness. (Later, when the newest missiles with light filters get issued, you won't have to do this because they are easy on the eyes. But for now, just shut your little peepers for a coupla seconds when you blast off a missile at night.)

TIP —The further away a Shillelagh missile gets the longer it takes to change course after you give the signal. This is easy to forget. You should remember it, though, particularly when the missile is close to maximum range or you're trying to hit a moving target. It's real important to keep the line-of-sight on or near the target center for the last few seconds before the missile impact.

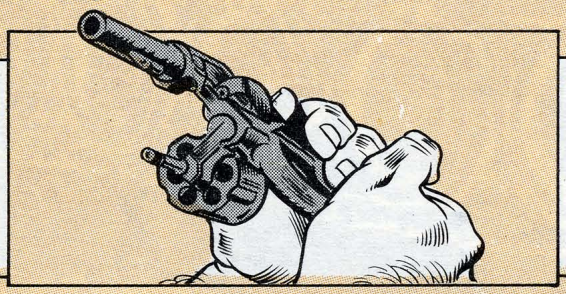
.38-CAL PEASHOOTER . . .

GIVE IT

Your 6-shot side arm needs tender loving care (TLC) to keep it PM-ready for any face-off. Eyeball, clean, and lube your handy-dandy gun whenever necessary. No one wants to holster an **un**-gun!

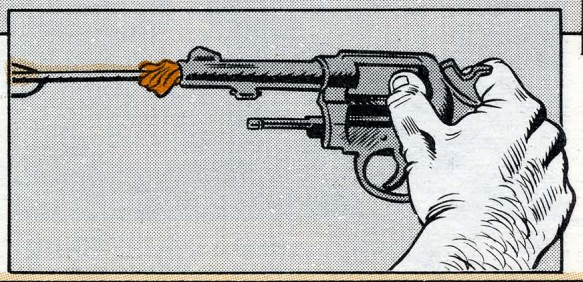
BEFORE-FIRING PM

Check bore, chamber, exterior receiver parts for dirt.

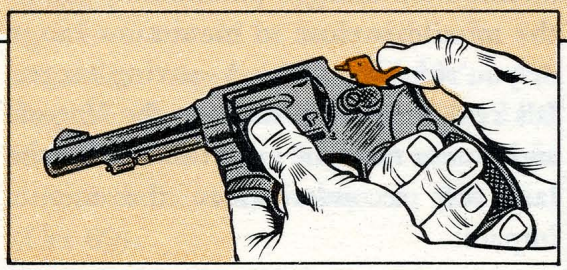


Wipe outer surfaces of gun with a clean cloth dunked in rifle bore cleaner (RBC) MIL-C-372 then wrung out.

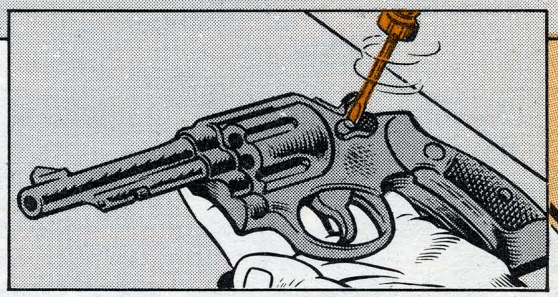
Run a clean patch thru the bore to remove any extra oil.



Check operation of locking bolt, extractor rod, cylinder and yoke, thumbpiece, and hammer.



Check cylinder for alinement and tightness. Keep all screws tight.

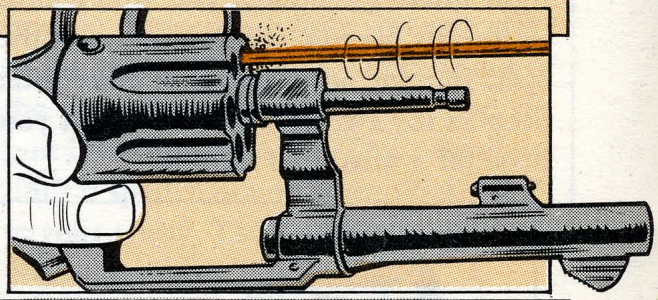


AFTER-FIRING PM

Carbon deposits, primer salts, powder ashes get the heave-ho, pronto. Use rifle bore cleaner on the barrel and cylinder.

Any hard-to-dislodge rust or crud gets the ramrod treatment with copper brush. Leave a light coat of PL special on the bore and chambers between cleanings.

Use PL special full strength for maxi-efficiency and protection.



Remove all traces of rust with crocus cloth. (Emery cloth is a NO-NO!)

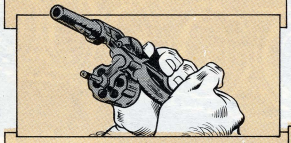
.38-CAL PEASHOOTER . . .

GIVE IT POW PM

Your 6-shot side arm needs tender loving care (TLC) to keep it PM-ready for any face-off. Eyeball, clean, and lube your handy-dandy gun whenever necessary. No one wants to holster an **un**-gun!

BEFORE-FIRING PM

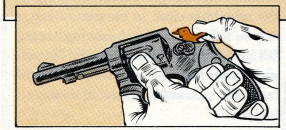
Check bore, chamber, exterior receiver parts for dirt.



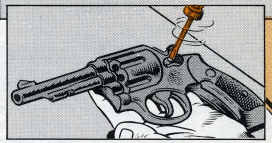
Wipe outer surfaces of gun with a clean cloth dunked in rifle bore cleaner (RBC) MIL-C-372 then wrung out.

Run a clean patch thru the bore to remove any extra oil.

Check operation of locking bolt, extractor rod, cylinder and yoke, thumbpiece, and hammer.



Check cylinder for alinement and tightness. Keep all screws tight.

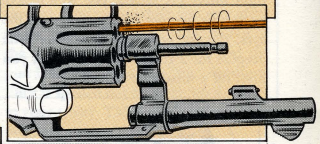


AFTER-FIRING PM

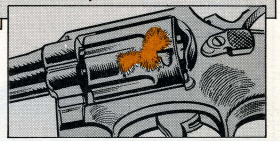
Carbon deposits, primer salts, powder ashes get the heave-ho, pronto. Use rifle bore cleaner on the barrel and cylinder.

Any hard-to-dislodge rust or crud gets the ramrod treatment with copper brush. Leave a light coat of PL special on the bore and chambers between cleanings.

Use PL special full strength for maxi-efficiency and protection.



Remove all traces of rust with crocus cloth. (Emery cloth is a NO-NO!)



AMMO PM

Keep cartridges clean. Wipe off dirt, sand, water, rust, excess oil, before putting rounds into the cylinder.

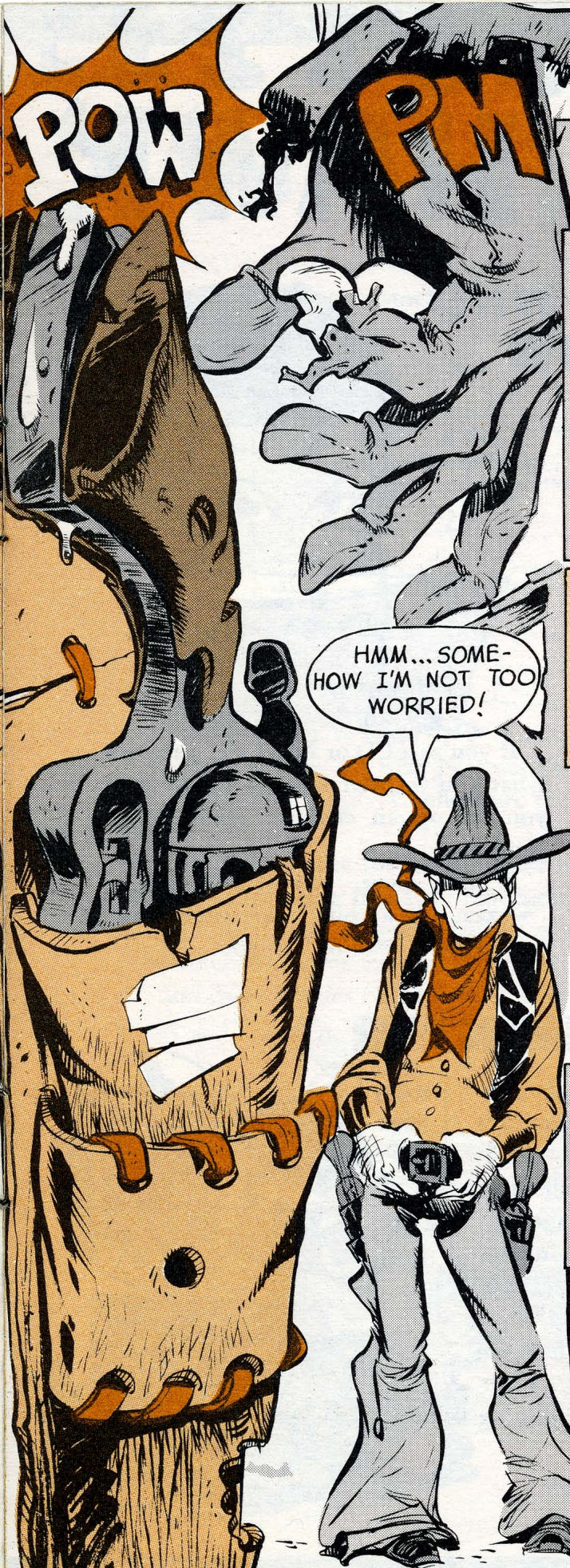
Dented, scratched cartridges, loose bullets, corroded cases? Turn 'em in—fast. Never use a battered round.

Ammo in leather pouches and gun belts corrodes faster.

Shiny, polished ammo makes a good show, but doesn't improve performance. Lone Ranger type ammo is OUT!

Here's the stuff you can draw from your unit arms room to keep your 6-shooter up to par:

Rifle bore cleaner (RBC); Lubricating oil, general purpose (PL special); Swab, small arms cleaning; Handle, cleaning rod; Brush, copper; Cloth, abrasive crocus; FM 23-35 (Jul 60).



AMMO PM

Keep cartridges clean. Wipe off dirt, sand, water, rust, excess oil, before putting rounds into the cylinder.

Dented, scratched cartridges, loose bullets, corroded cases? Turn 'em in—fast. Never use a battered round.

Ammo in leather pouches and gun belts corrodes faster.

Shiny, polished ammo makes a good show, but doesn't improve performance. Lone Ranger type ammo is OUT!

NO "SILVER" BULLETS, PLEASE!

Here's the stuff you can draw from your unit arms room to keep your 6-shooter up to par:

Rifle bore cleaner (RBC); Lubricating oil, general purpose (PL special); Swab, small arms cleaning; Handle, cleaning rod; Brush, copper; Cloth, abrasive crocus; FM 23-35 (Jul 60).

HAWK

FOR THE JOE WHO WANTS TO KNOW . . .

If you're a missile system maintenance type, or are in any way responsible for maintenance, there're a coupla' fine pubs just begging to be read by you.

First is TM 750-245-4 (Oct 69) Quality Control Inspection Criteria (Guided Missile Systems), and the other is FM 9-59 (Mar 70), Missile Support Unit Operations.

You can glom onto either pub at your direct support platoon if your unit doesn't have a DS responsibility.

Either pub gives great insight into the need for quality control and top maintenance at the unit level . . . and lets you avoid the problems you can create for support.

If you're a CO or NCO, the pubs are what you've been looking for to help you set up an effective maintenance program.

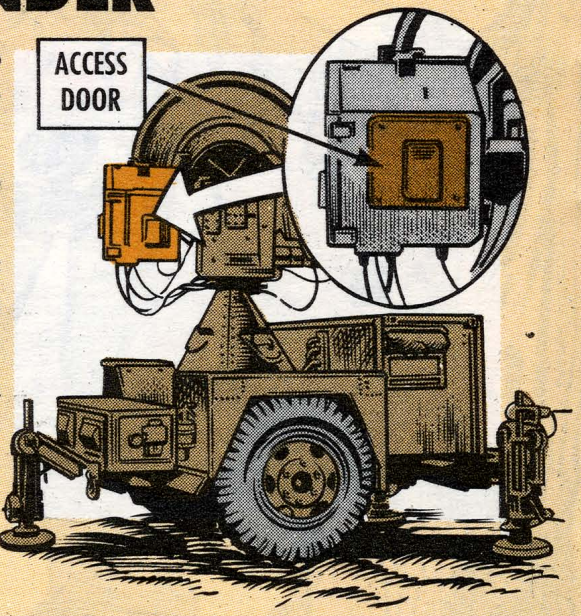
What's more, you won't need a "wuzzat" or a "huh" next time somebody spouts "MTBF" at you.

ROR REMINDER

Give an extra look next time you're about to fasten the access door on the receiver-transmitter of your AN/MPQ-37 Hawk ROR.

Chances are some of the cabling is about to get pinched, with resultant loss of voltage, etc. So ease the door back on . . . after moving the cables clear. And make sure the cable clamps are adjusted.

If local oscillator lockup procedure has you puzzled, pages 2-27 through 2-34 of TM 9-1430-510-12/1 (Aug 66) spell it out for you in living color.



HAWK

FOR THE JOE WHO WANTS TO KNOW . . .

If you're a missile system maintenance type, or are in any way responsible for maintenance, there're a coupla' fine pubs just begging to be read by you.

First is TM 750-245-4 (Oct 69) Quality Control Inspection Criteria (Guided Missile Systems), and the other is FM 9-59 (Mar 70), Missile Support Unit Operations.

You can glom onto either pub at your direct support platoon if your unit doesn't have a DS responsibility.

Either pub gives great insight into the need for quality control and top maintenance at the unit level . . . and lets you avoid the problems you can create for support.

If you're a CO or NCO, the pubs are what you've been looking for to help you set up an effective maintenance program.

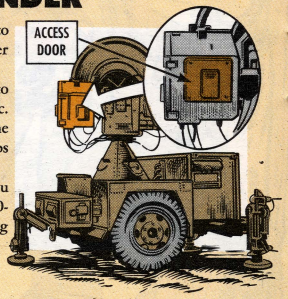
What's more, you won't need a "wuzzat" or a "huh" next time somebody spouts "MTBF" at you.

ROR REMINDER

Give an extra look next time you're about to fasten the access door on the receiver-transmitter of your AN/MPQ-37 Hawk ROR.

Chances are some of the cabling is about to get pinched, with resultant loss of voltage, etc. So ease the door back on . . . after moving the cables clear. And make sure the cable clamps are adjusted.

If local oscillator lockup procedure has you puzzled, pages 2-27 through 2-34 of TM 9-1430-510-12/1 (Aug 66) spell it out for you in living color.



Notes

X1 FSN'S

The X1 items in the Hawk system new parts manuals got you bugged because you feel they should be stock-numbered?

And, you don't think it's necessary to requisition the next higher item because some X1 items cost so little?

P-F-2523	5305-054-5649	SCREW, MACHINE MS51957-15	(96906)	
P-D-2524	5305-054-6673	SCREW, MACHINE MS51957-48	(96906)	
X1—2525		SCREW MS51957-50	(96906)	EA
X1—2526		PLATE 9077950	(18876)	EA
		PLATE 9077702	(18876)	EA
		GROMMET MS35489-40	(96906)	EA

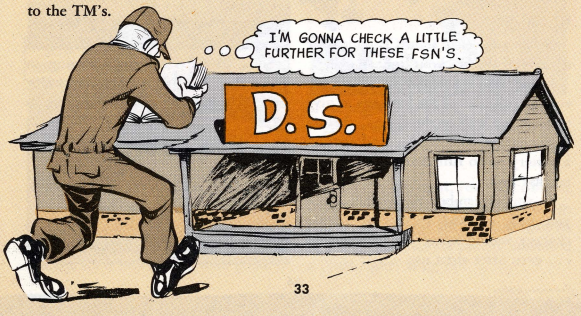
WHEN YOU SPOT THIS IN YOUR — 25P, CHECK OUT THE PART NUMBER!

Chances are you're right on both counts. So wot to do?

So check out the X1 item part numbers in the Army Master Data File at your DS or post-level supply. Chances are they do have FSN's . . . and the parts are in stock.

If you need a part for maintenance and there's no FSN listed, requisition it, item-for-item, using non-FSN requisitioning procedure (see para 3-20.1, Ch 34, AR 725-50, or refresh your memory with PS 205, page 6).

Maintenance items in current TM's with X1 source codes are being reviewed . . . and correct codes (with FSN's, where applicable) will be in the next revisions to the TM's.



notes

X1 FSN'S

The X1 items in the Hawk system new parts manuals got you bugged because you feel they should be stock-numbered?

And, you don't think it's necessary to requisition the next higher item because some X1 items cost so little?

P-F-2523	5305-054-5649	SCREW, MACHINE MS51957-15 (96906)		
P-C-2524	5305-054-6673	SCREW, MACHINE MS51957-48 (96906)		
X1--2525		SCREW MS51957-50 (96906)	EA	
X1--2526		PLATE 9077950 (18876)	EA	
		PLATE 9077702 (18876)	EA	
		GROMMET MS35489-40 (96906)	EA	

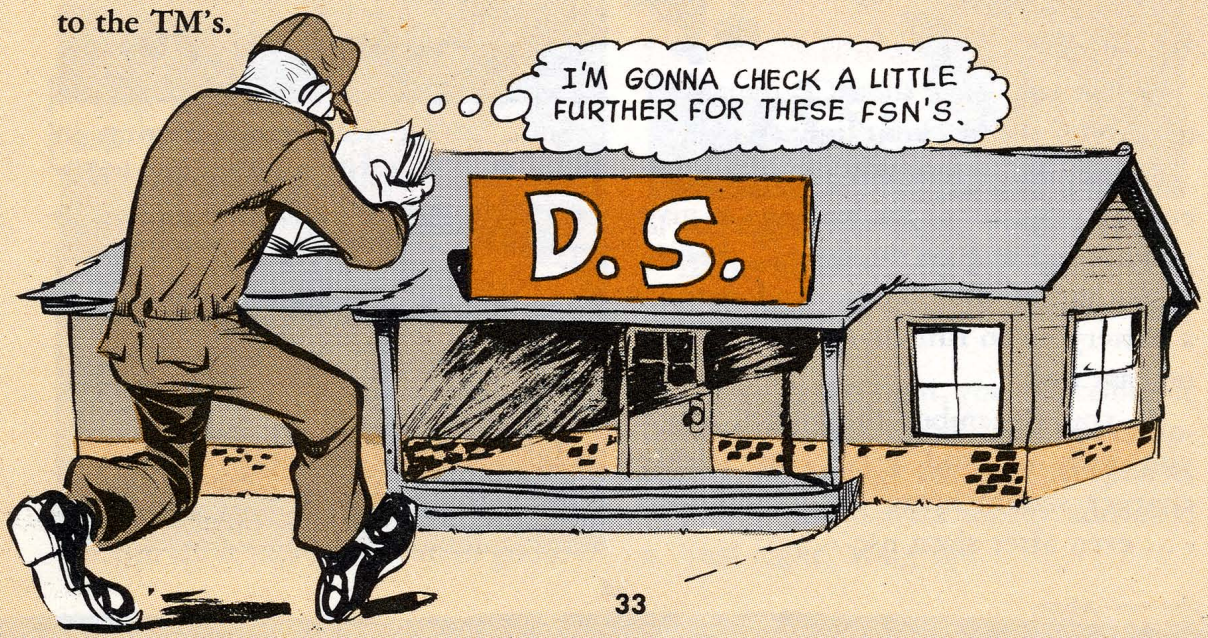
WHEN YOU SPOT THIS IN YOUR — 25P, CHECK OUT THE PART NUMBER!

Chances are you're right on both counts. So wot to do?

So check out the X1 item part numbers in the Army Master Data File at your DS or post-level supply. Chances are they do have FSN's . . . and the parts are in stock.

If you need a part for maintenance and there's no FSN listed, requisition it, item-for-item, using non-FSN requisitioning procedure (see para 3-20.1, Ch 34, AR 725-50, or refresh your memory with PS 205, page 6).

Maintenance items in current TM's with X1 source codes are being reviewed . . . and correct codes (with FSN's, where applicable) will be in the next revisions to the TM's.



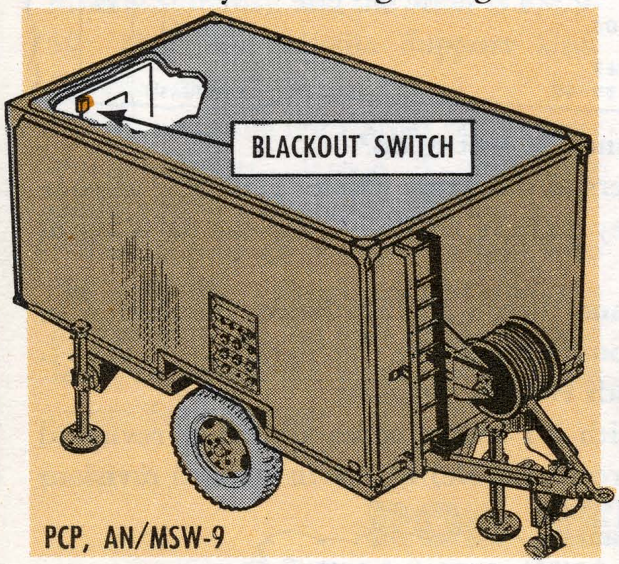
FROM PAR

Hawk system components thrive on short talk, from your PAR's azimuth ring to your PCP's roof.

To those initial-ridden lists, add PM. After that, maybe a double-OK.

STARTING FROM UP, consider the roof of the PCP, AN/MSW-9.

Hold one on a 4-handed poker game up there. Three people on the roof is pot limit, even though you may feel more are needed up there at times. Try an overload and you'll make leaks . . . and somebody inside is gonna get wet.



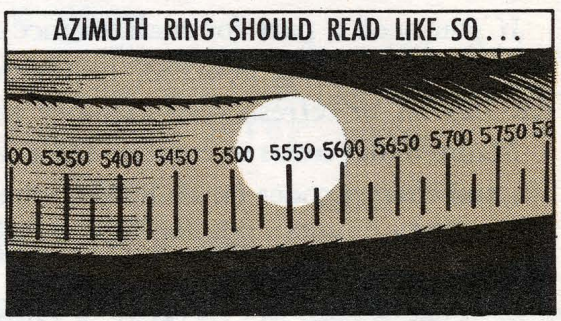
PCP, AN/MSW-9

When you leave the PCP remember to turn off the blackout light switch.

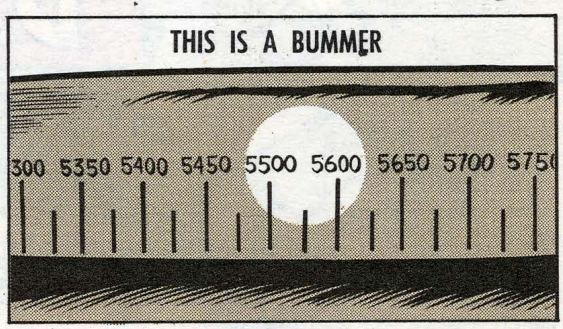
Forget the switch and you might get enough juice out of the batteries to give you one sad wail on the siren . . . before it discharges completely. And getting a battery up to full charge, and out, is no easy task.

If you remember the switch when you lock up and leave, the trickle charger should bring the batteries up . . . even after siren use.

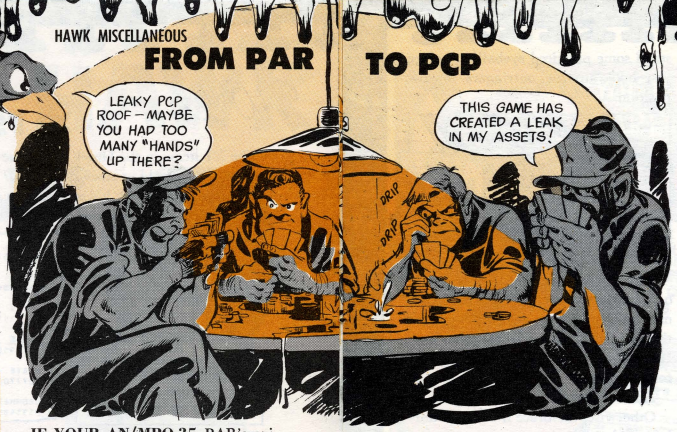
IF YOUR AN/MPQ-35 PAR's azimuth scale ring is a replacement, or if you need a new one, double eyeball the scale marking at "5500."



Some of the scale rings coming in under Part No. 10109226, FSN 1430-945-5719, have no "5550" reading, so



FROM PAR TO PCP

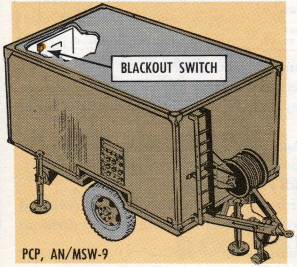


Hawk system components thrive on short talk, from your PAR's azimuth ring to your PCP's roof.

To those initial-ridden lists, add PM. After that, maybe a double-OK.

STARTING FROM UP, consider the roof of the PCP, AN/MSW-9.

Hold one on a 4-handed poker game up there. Three people on the roof is pot limit, even though you may feel more are needed up there at times. Try an overload and you'll make leaks . . . and somebody inside is gonna get wet.

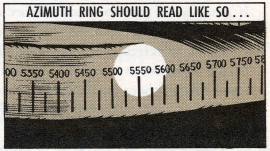


When you leave the PCP remember to turn off the blackout light switch.

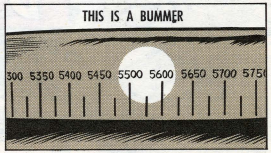
Forget the switch and you might get enough juice out of the batteries to give you one sad wail on the siren . . . before it discharges completely. And getting a battery up to full charge, and out, is no easy task.

If you remember the switch when you lock up and leave, the trickle charger should bring the batteries up . . . even after siren use.

IF YOUR AN/MPQ-35 PAR's azimuth scale ring is a replacement, or if you need a new one, double eyeball the scale marking at "5500."



Some of the scale rings coming in under Part No. 10109226, FSN 1430-945-5719, have no "5550" reading, so

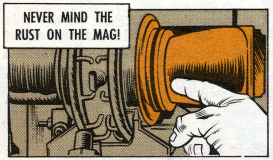


instead of graduating by 25-mil tick marks, you've only got 1 tick mark between 5500 and 5600.

Which means that every reading above 5500 is going to be off by at least 25 mils.

So, if the scale's wrong, get the ring replaced.

Still with the PAR, remember this work-saver on the stabilotron magnet:



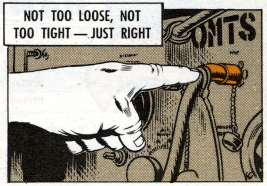
it'll rust when the radar set's not in use, but it affects the magnet not one bit.

Trying to get the rust off that grabber can do it more harm than good.

THE AN/TSM-41, -42, AND -43 electronic shop console filters must be cleaned weekly . . . to prevent dirty contacts, overheating and other damage.

On the weekly, tap the dust and dirt out before you clean the filter with warm water and solvent. At least once a month blow the dirt out with an air hose before you make with the wet clean.

A COAXIAL WORD on the OMTS shops: if coax connectors are too loose



or too tight, you lose . . . either way.

If they're loose, you lose critical decibels on both the sending and receiving ends.

If they're too tight, you can crimp or cut the ground, which loses coax capability, or damage the coax receptacle.

The connectors are touchy and need a "just right" snug up.

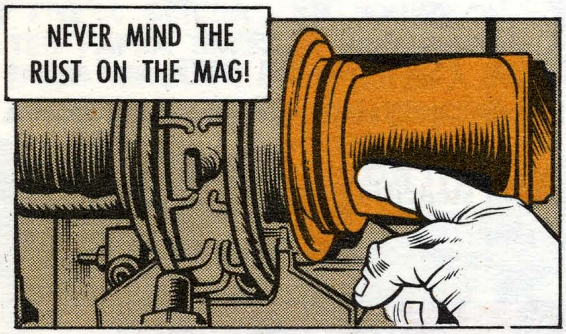
P.S. MORE

instead of graduating by 25-mil tick marks, you've only got 1 tick mark between 5500 and 5600.

Which means that every reading above 5500 is going to be off by at least 25 mils.

So, if the scale's wrong, get the ring replaced.

Still with the PAR, remember this work-saver on the stabilotron magnet:



it'll rust when the radar set's not in use, but it affects the magnet not one bit.

Trying to get the rust off that grabber can do it more harm than good.

THE AN/TSM-41, -42, AND -43 electronic shop console filters must be cleaned weekly . . . to prevent dirty contacts, overheating and other damage.

On the weekly, tap the dust and dirt out before you clean the filter with warm water and solvent. At least once a month blow the dirt out with an air hose before you make with the wet clean.

A COAXIAL WORD on the OMTS shops: if coax connectors are too loose

or too tight, you lose . . . either way.

If they're loose, you lose critical decibels on both the sending and receiving ends.

If they're too tight, you can crimp or cut the ground, which loses coax capability, or damage the coax receptacle.

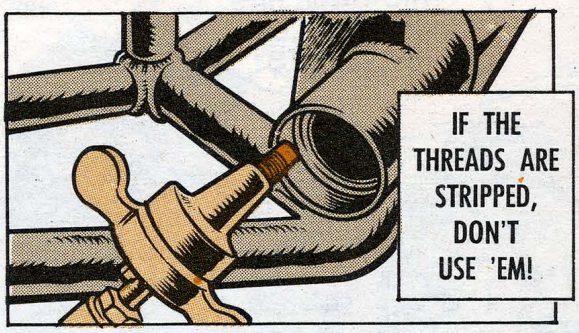
The connectors are touchy and need a "just right" snug up.

PS MORE

Clues: if the cable turns in the connector, the connector's not snugged up enough.

If the center pin (contact) extends beyond the ceramic, the connector's too tight. Which means you can damage the pin . . . and the receptacle.

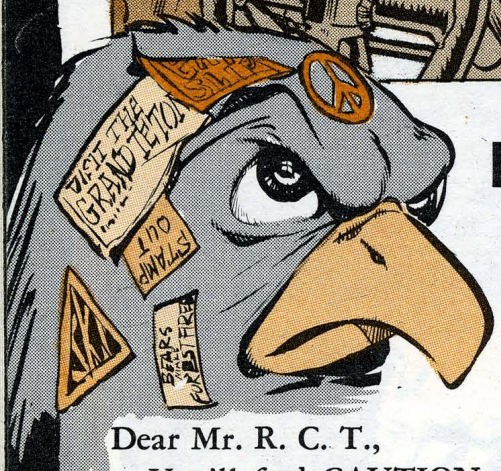
THE XM78E2 TOWED LAUNCHER towing brace (sway bar, stabilizer —you name it) on the outriggers can stand some practiced eyeballing before you hook up the outriggers in tow position.



Like on the threads. If they're totally or partially stripped, forget 'em. Also, match the brace threads to the outrigger threads. Some are coarse, some are fine. If they don't turn easy, forget about forcing them.

And snug them uptight.

Otherwise, the brace'll back off during a ride leading to some very expensive damage — anything from a butchered outrigger to a launcher in a ditch.



HAWK DECALS

Dear Half-Mast,

Can we get replacements for the high voltage warning and other decals used with our Hawk missile system?

CWO R. C. T.

Dear Mr. R. C. T.,

You'll find CAUTION: HIGH VOLTAGE, FSN 7690-281-3077, and other decals listed in SC 7660/90-IL (Jul 67). Some special decals may have to be stenciled on.

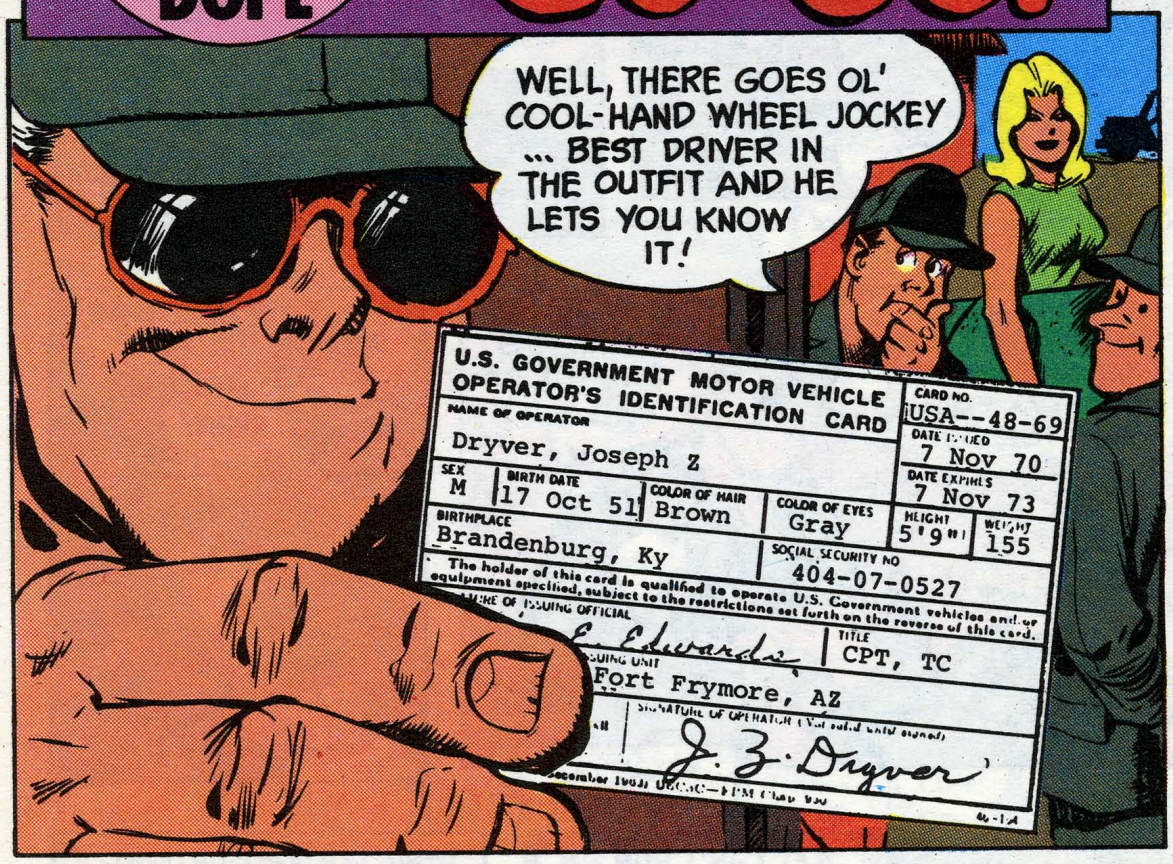
Directions for removing decals and info on stenciling is in Ch 1 (Feb 65) to TM 9-213, Painting Instructions for Field Use.

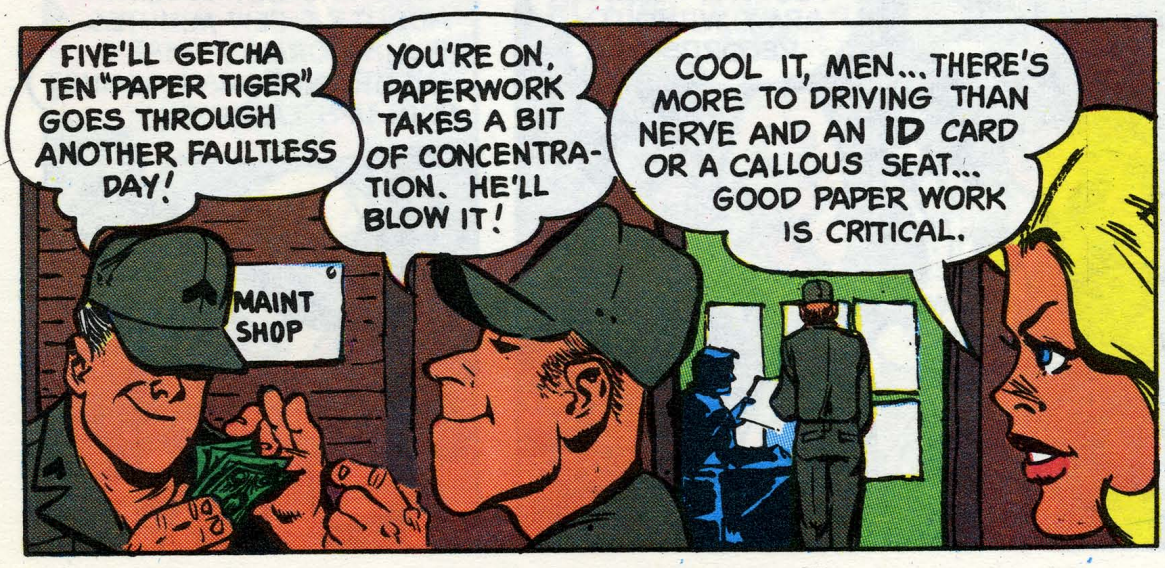
CAUTION HIGH VOLTAGE

Half-Mast

JOE'S DOPE

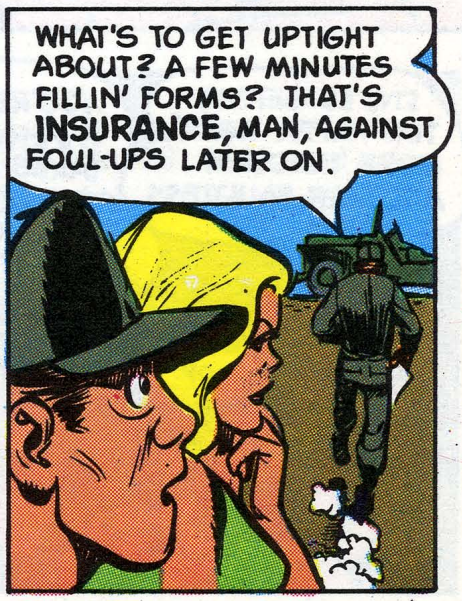
WHEN THE RECORDS ARE RIGHT - YOU'RE GO-GO!

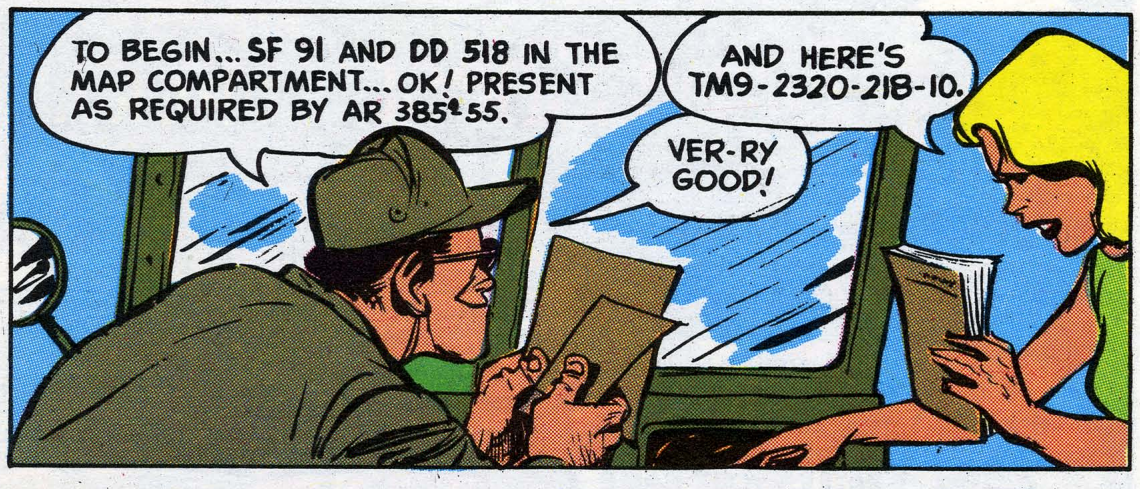


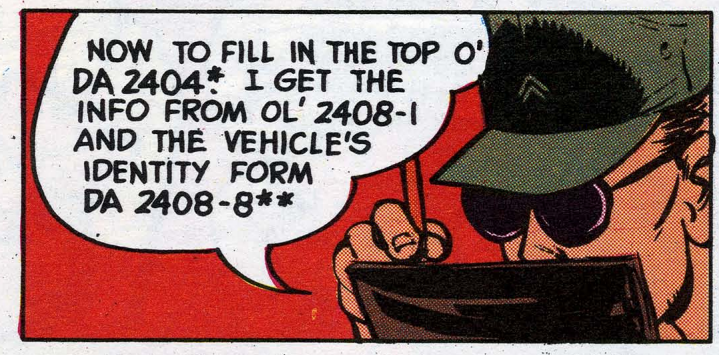


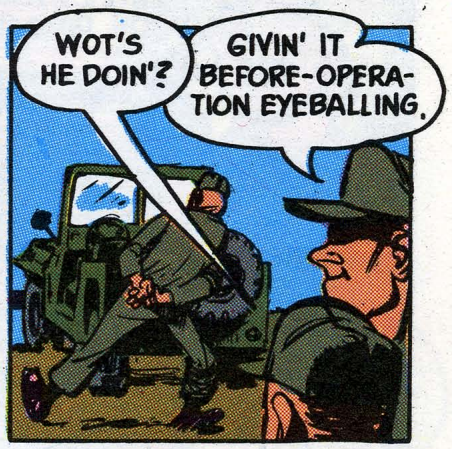
* *Organizational Control Record for Equipment*

* *Daily Log*

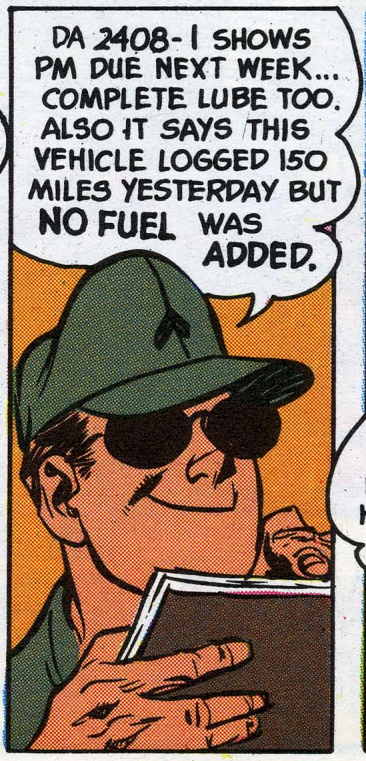






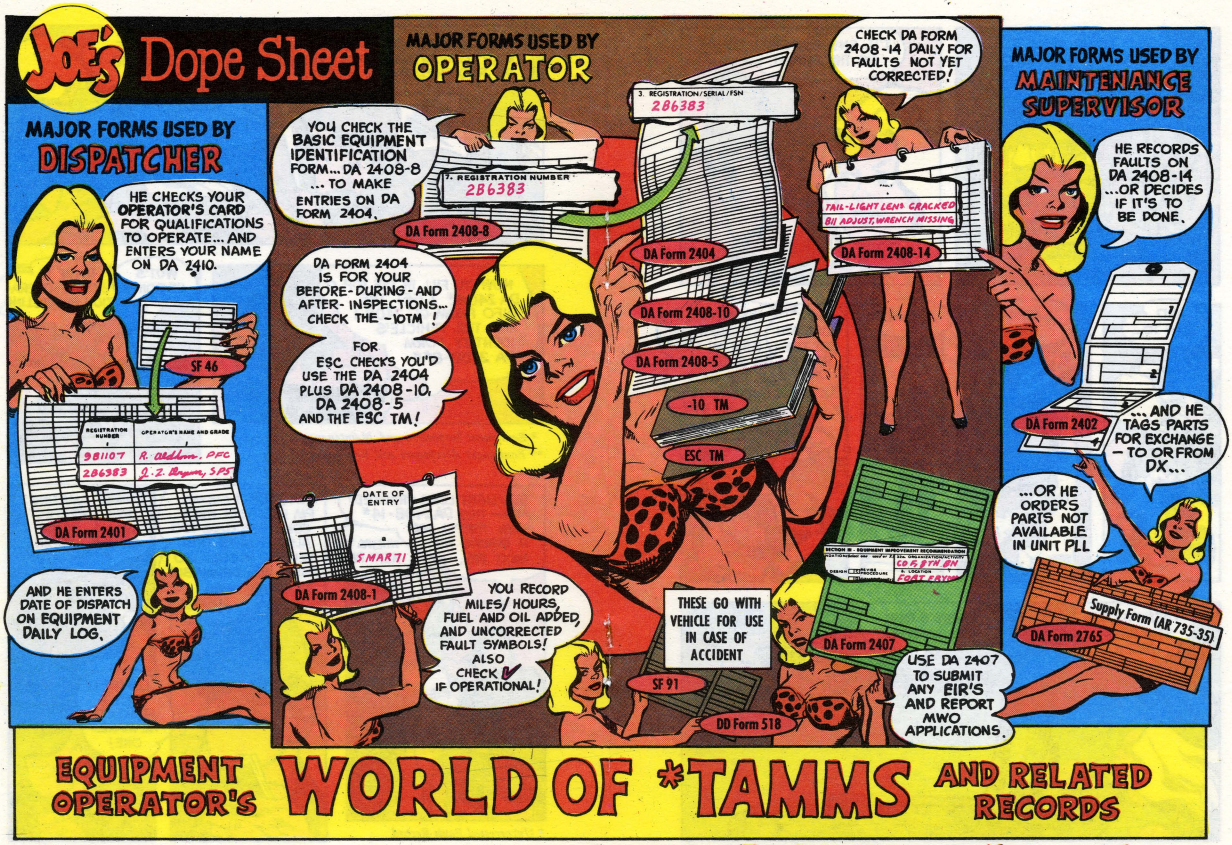


* *Equipment Inspection and Maintenance Worksheet.*
** *Equipment Acceptance and Registration Record*

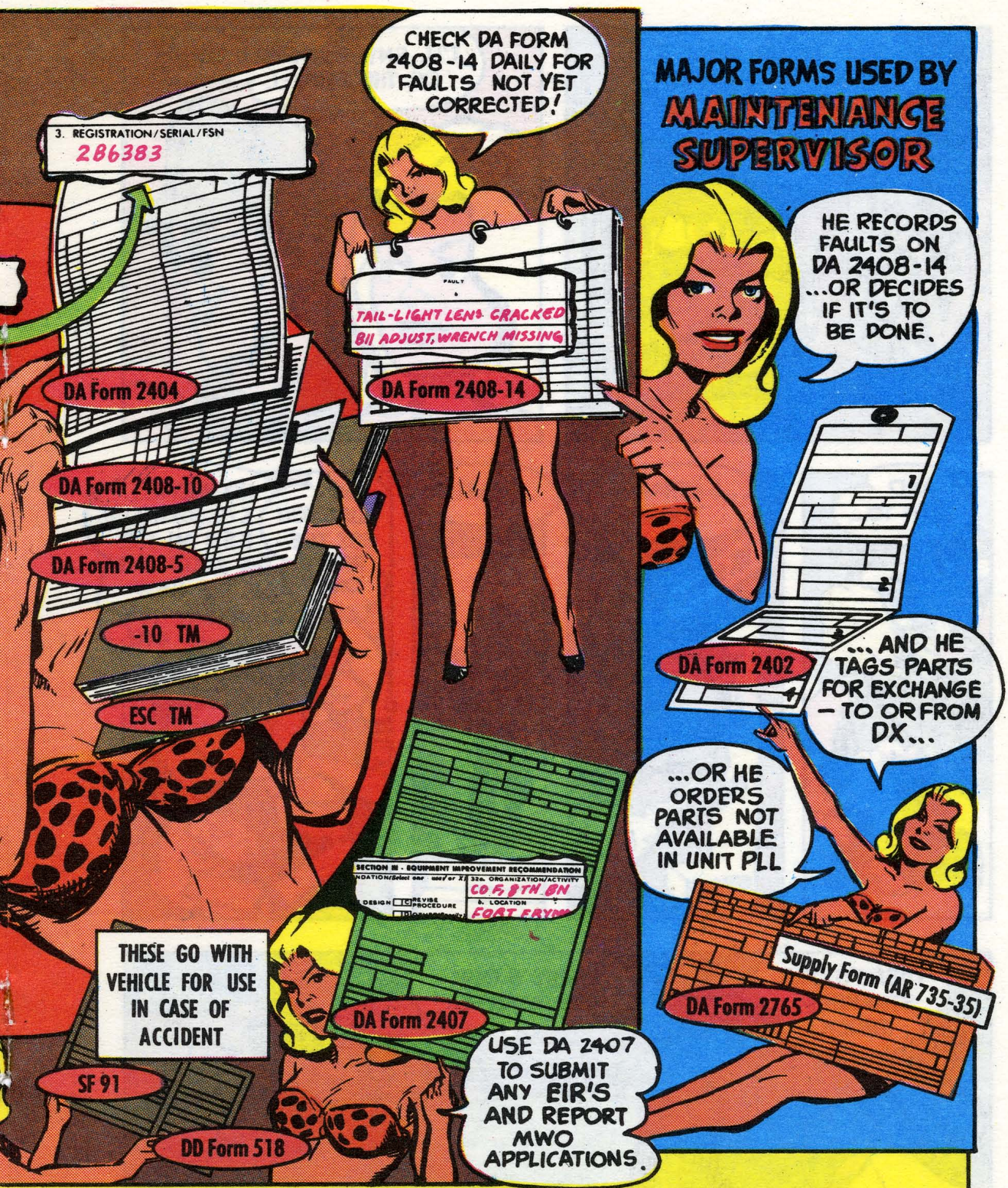


* *Uncorrected Fault Record*

JOE'S Dope Sheet
MAJOR FORMS USED BY OPERATOR
MAJOR FORMS USED BY DISPATCHER
HE CHECKS YOUR OPERATOR'S CARD FOR QUALIFICATIONS TO OPERATE... AND ENTERS YOUR NAME ON DA 2410.
SF 46
REGISTRATION NUMBER
OPERATOR'S NAME AND GRADE
981107
R. Aldhom, PFC
2B6383
J. Z. Dryan, SP5
DA Form 2401
AND HE ENTERS DATE OF DISPATCH ON EQUIPMENT DAILY LOG.
YOU CHECK THE BASIC EQUIPMENT IDENTIFICATION FORM... DA 2408-8 ... TO MAKE ENTRIES ON DA FORM 2404.
7. REGISTRATION NUMBER
2B6383
DA Form 2408-8
DA FORM 2404 IS FOR YOUR BEFORE-DURING-AND AFTER-INSPECTIONS... CHECK THE -10TM !
FOR ESC CHECKS YOU'D USE THE DA 2404 PLUS DA 2408-10, DA 2408-5 AND THE ESC TM!
DATE OF ENTRY
5 MAR 71
DA Form 2408-1
YOU RECORD MILES/HOURS, FUEL AND OIL ADDED, AND UNCORRECTED FAULT SYMBOLS! ALSO CHECK ✓ IF OPERATIONAL!
EQUIPMENT OPERATOR'S WORLD O

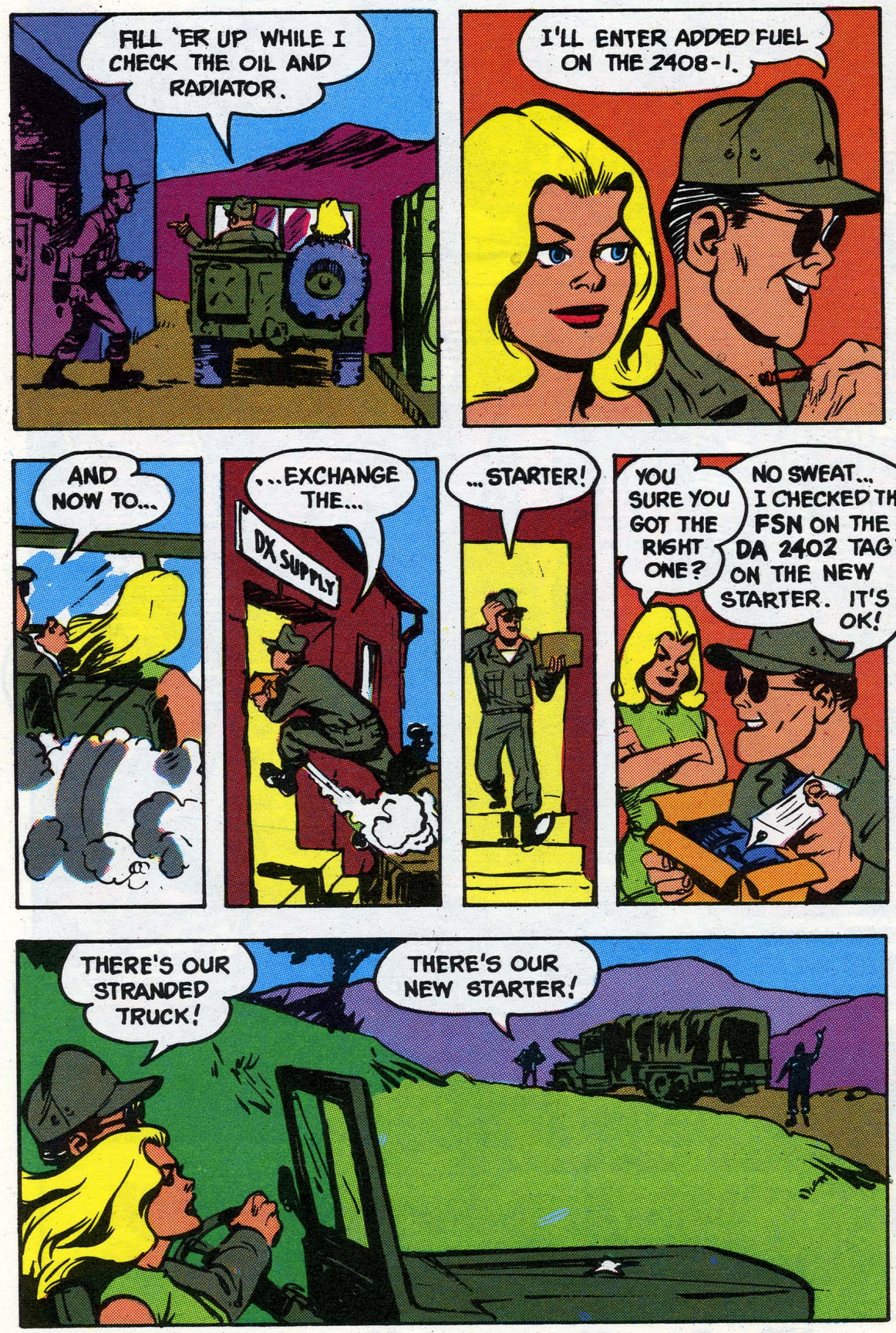


*The Army Maintenance Management System



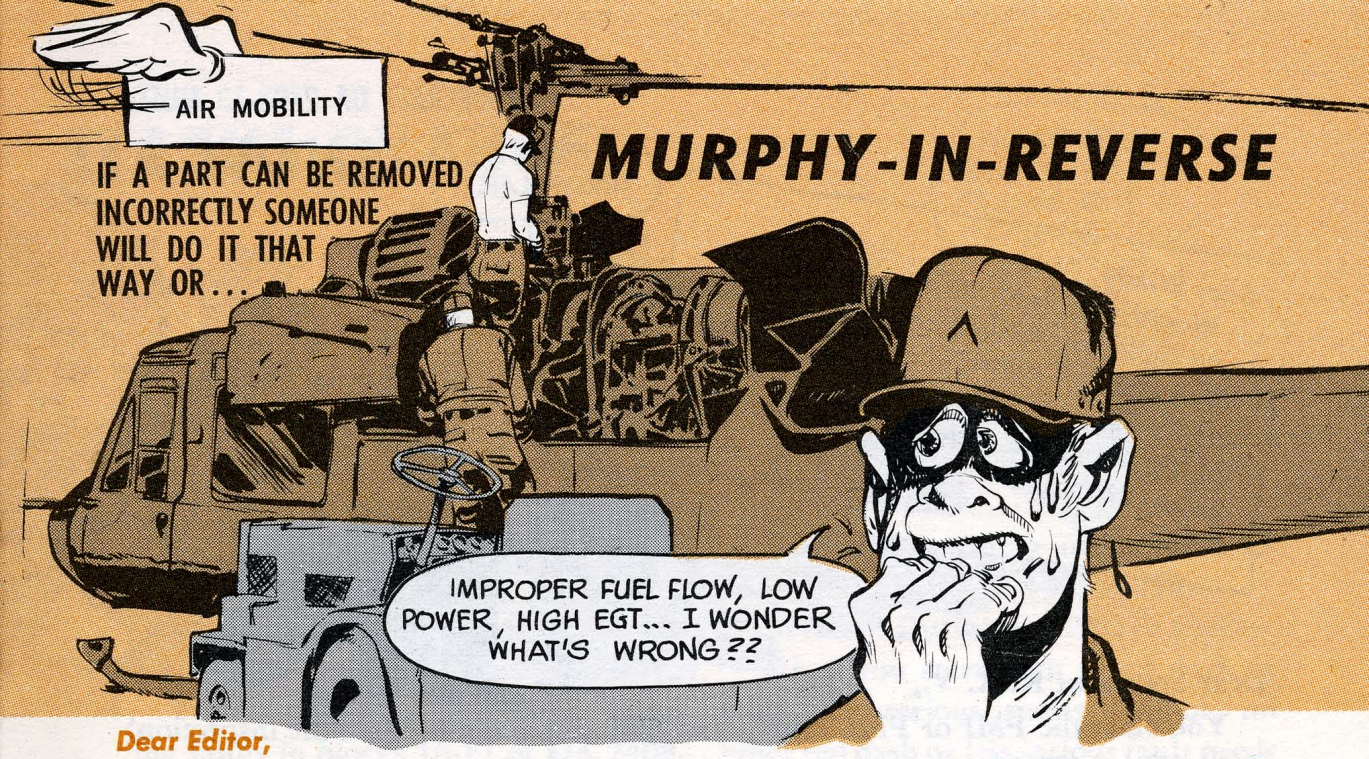
F *TAMMS AND RELATED RECORDS

*The Army Maintenance Management System


FILL 'ER UP WHILE I CHECK THE OIL AND RADIATOR.
I'LL ENTER ADDED FUEL ON THE 2408-1.
AND NOW TO...
...EXCHANGE THE...
DX SUPPLY
...STARTER!
YOU SURE YOU GOT THE RIGHT ONE?
NO SWEAT... I CHECKED THE FSN ON THE DA 2402 TAG ON THE NEW STARTER. IT'S OK!
THERE'S OUR STRANDED TRUCK!
THERE'S OUR NEW STARTER!

* *Equipment Component Register*

ABSOLUTELY ON THE BALL! YOU SHOULD GET A MEDAL!
AWW, TWARN'T NUTHIN'.
OK, HOW ABOUT A REWARD?
COOL IT, LOVER... FINISH YOUR PAPER WORK.
GLP: SHALL WE PARK DOWN BY THE RIVER?
NO! NO! YOU JUST GET THOSE RECORDS IN TO THE DISPATCHER!
UH--- AH--- YEAH.. LESSEE, GOTTA ENTER MISSING ITEM ON DA 2404 --- MY GLASSES ARE FOGGED UP.
HEY, HOT SHOT! REWRITE THESE FORMS. THEY'RE NOT LEGIBLE!
HUH?
TOLDJA HE'D BOMB OUT... PAY ME! UNREADABLE FORMS ARE A GOOF!
I OUGHTA MAKE CONNIE PAY FOR HALF OF THIS.



Dear Editor,

We've found that the easiest way to replace a Huey or HueyCobra T-53 engine fuel control is definitely not the best way. It can lead to all sorts of fun and games such as improper fuel flow, low power, high EGT and shorter engine life.

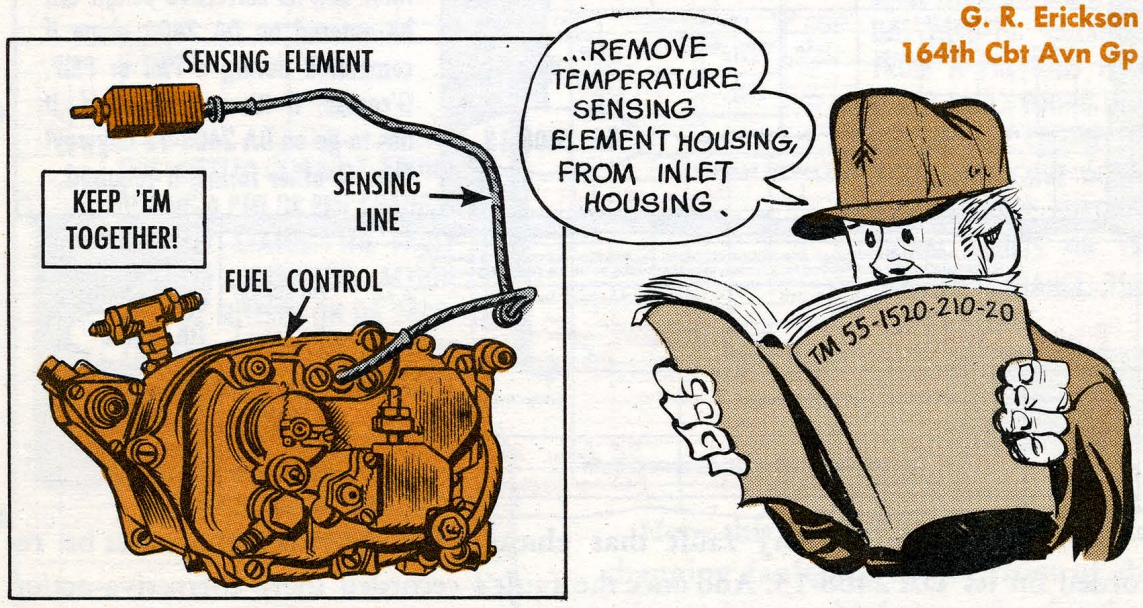
The shortcut that some mechs take is to disconnect the temperature sensing element line at the fuel control. They then put on the new fuel control and use the old uncalibrated, dirty sensing element. That's when fuel control problems really begin.

Of course, each new fuel control comes with its own sensing element. That's because they are calibrated together at the depot fuel lab.

There is just no shortcut to the Huey poop in para 5-345d of TM 55-1520-210-20 (May 69).

The sensing element has to be changed along with the fuel control.

G. R. Erickson
164th Cbt Avn Gp



(Ed Note—You're so right! That Murphy-in-reverse also leads to a shortage of sensing elements at the depot.)

AIRCRAFT DA 2408-13 MUST...

SHOW ALL

Dear Windy,

Would you spell out exactly what aircraft faults can be entered on the DA 2404 alone at a PMI or PMP? That is, what faults can be signed off there without an entry of the fault and its corrective action on DA 2408-13?

SP6 K. R. V.

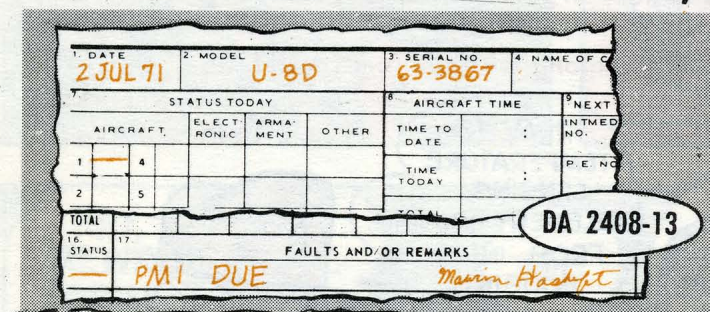
Dear Specialist K. R. V.,

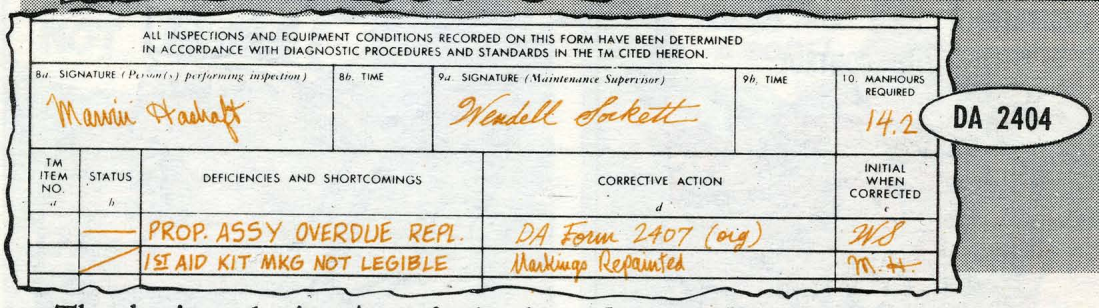
You start the PMI or PMP with a red dash status symbol (for the inspection) on the DA 2408-13.

If no fault with a more serious status symbol (circled red X or red X) is carried over from a previous DA 2408-13 — and if no fault found during the inspection gets a status symbol more serious than the red dash — you won't need to enter any fault you find during the inspection on DA 2408-13.

And, if there's a red X status symbol on the DA 2408-13 at the start of the inspection, all other faults found during the inspection can be entered on DA 2404 **only** — with corrective action shown there only.

For any fault with a status symbol that's a red dash or red slash. The fault and its corrective action can be entered on DA 2404 alone if completed during a PMI or PMP. O'course, if it's not corrected, it has to go on DA 2408-13 anyway! Then to other forms, if required.





The basic rule is: **Any fault that changes the aircraft status** must be recorded on its DA 2408-13. And once the fault's recorded there corrective action must be recorded on DA 2408-13, too (on the same DA 2408-13 or one it's carried forward on).

AIRCRAFT DA 2408-13 MUST...

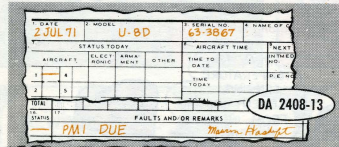
SHOW ALL

Dear Specialist K. R. V.,

You start the PMI or PMP with a red dash status symbol (for the inspection) on the DA 2408-13.

If no fault with a more serious status symbol (circled red X or red X) is carried over from a previous DA 2408-13 — and if no fault found during the inspection gets a status symbol more serious than the red dash — you won't need to enter any fault you find during the inspection on DA 2408-13.

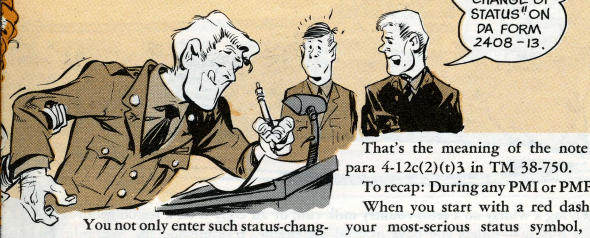
And, if there's a red X status symbol on the DA 2408-13 at the start of the inspection, all other faults found during the inspection can be entered on DA 2404 **only** — with corrective action shown there only.



For any fault with a status symbol that's a red dash or red slash. The fault and its corrective action can be entered on DA 2404 alone if completed during a PMI or PMP. O'course, if it's not corrected, it has to go on DA 2408-13 anyway! Then to other forms, if required.

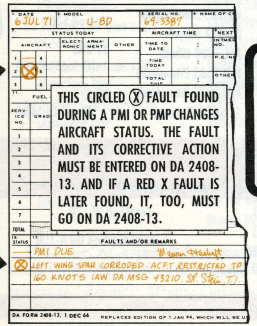
The basic rule is: **Any fault that changes the aircraft status** must be recorded on its DA 2408-13. And once the fault's recorded there corrective action must be recorded on DA 2408-13, too (on the same DA 2408-13 or one it's carried forward on).

STATUS CHANGES

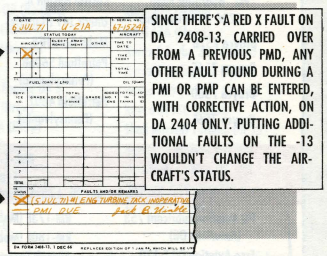


You not only enter such status-changing faults in blocks 16-17 of DA 2408-13 — you make the status change in block 7. That's so the DA 2408-13 will show aircraft status **at all times.**

This requirement to record status-changing faults, and their correction, on DA 2408-13 is not affected by the fact that DA 2404 is attached to and kept with DA 2408-13.



THIS CIRCLED (X) FAULT FOUND DURING A PMI OR PMP CHANGES AIRCRAFT STATUS. THE FAULT AND ITS CORRECTIVE ACTION MUST BE ENTERED ON DA 2408-13. AND IF A RED X FAULT IS LATER FOUND, IT, TOO, MUST GO ON DA 2408-13.



SINCE THERE'S A RED X FAULT ON DA 2408-13, CARRIED OVER FROM A PREVIOUS PMD, ANY OTHER FAULT FOUND DURING A PMI OR PMP CAN BE ENTERED, WITH CORRECTIVE ACTION, ON DA 2404 ONLY. PUTTING ADDITIONAL FAULTS ON THE -13 WOULDN'T CHANGE THE AIRCRAFT'S STATUS.

That's the meaning of the note in para 4-12c(2)(t)3 in TM 38-750.

To recap: During any PMI or PMP—

When you start with a red dash as your most-serious status symbol, no other red dash or less serious fault needs to go on DA 2408-13.

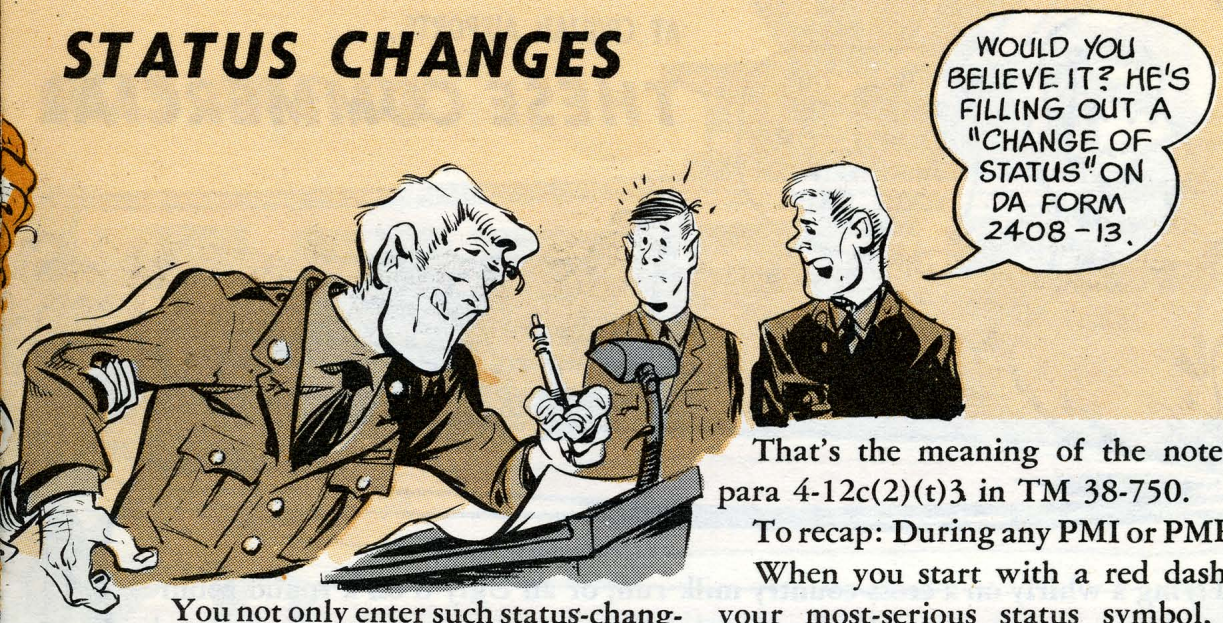
If you start with a carried-over circled red X, no other circled red X fault or any that's less serious needs to go on DA 2408-13.

Starting with a carried-over red X, no other fault needs to go on DA 2408-13 since the status won't change.

Hope this will help keep those status-changing faults always in front of the pilot and crew chief or mechanic when they check the bird's flying feathers.

Windy

STATUS CHANGES



You not only enter such status-changing faults in blocks 16-17 of DA 2408-13 — you make the status change in block 7. That's so the DA 2408-13 will show aircraft status **at all times.**

This requirement to record status-changing faults, and their correction, on DA 2408-13 is not affected by the fact that DA 2404 is attached to and kept with DA 2408-13.

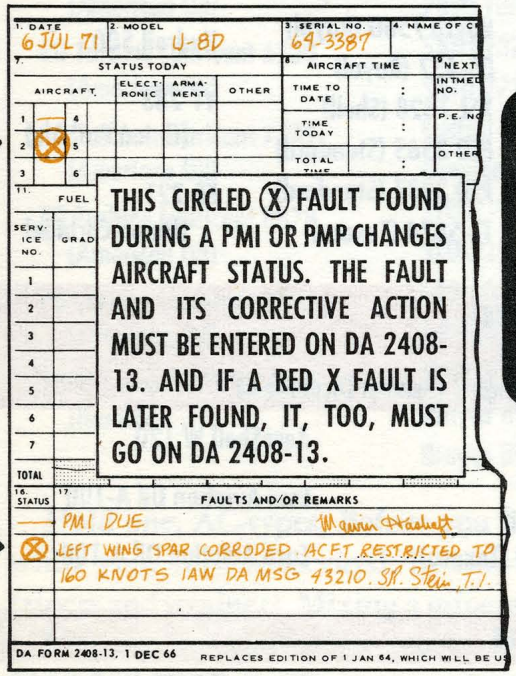
That's the meaning of the note in para 4-12c(2)(t)3 in TM 38-750.

To recap: During any PMI or PMP—

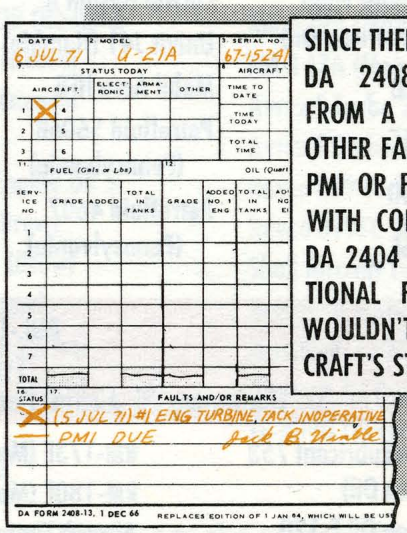
When you start with a red dash as your most-serious status symbol, no other red dash or less serious fault needs to go on DA 2408-13.

If you start with a carried-over circled red X, no other circled red X fault or any that's less serious needs to go on DA 2408-13.

Starting with a carried-over red X, no other fault needs to go on DA 2408-13 since the status won't change.



THIS CIRCLED (X) FAULT FOUND DURING A PMI OR PMP CHANGES AIRCRAFT STATUS. THE FAULT AND ITS CORRECTIVE ACTION MUST BE ENTERED ON DA 2408-13. AND IF A RED X FAULT IS LATER FOUND, IT, TOO, MUST GO ON DA 2408-13.



SINCE THERE'S A RED X FAULT ON DA 2408-13, CARRIED OVER FROM A PREVIOUS PMD, ANY OTHER FAULT FOUND DURING A PMI OR PMP CAN BE ENTERED, WITH CORRECTIVE ACTION, ON DA 2404 ONLY. PUTTING ADDITIONAL FAULTS ON THE -13 WOULDN'T CHANGE THE AIRCRAFT'S STATUS.

Hope this will help keep those status-changing faults always in front of the pilot and crew chief or mechanic when they check the bird's flying feathers.

Windy

AT CIVILIAN AIRPORTS . . .

THESE COMMERCIAL

Flying a whirly on a cross-country milk run, or an Ugly 8 on a round-robin is Code 6 duty — unless you have to refill an engine, transmission, or hydraulic oil tank enroute — and don't know what oil to ask for.

No sweat. Just make sure the commercial oil or lube is one listed here. You may not find a MIL SPEC on the containers, but Uncle Sugar guarantees they're equal to the Army brands.

MIL-H-5606
Hydraulic Fluid, Petroleum Base, Aircraft and Ordnance
Manufacturers' Designations

"PQ" Hydraulic Fluid 4226 (American Oil)
Brayco 757B
Brayco 756C
Brayco 756D
Brayco 756E
Castrol Hyspin A
Univis J41 (Humble)
Mobil Aero HFB
Petrofluid 5606B (Pennsylvania)
Petrofluid 4607 (Pennsylvania)
Royco 756C (Royal
Royco 756D (Royal)
DS-437 (Royal)
XSL 7828 (Shell)
PED 3565 (Standard)
PED 3337 (Standard)
TL-5874 (Texaco)
Stauffer Aero
Hydroil 500
YT-283 (Union Carbide)
FP-221 (Union Carbide)

MIL-L-22851
Type II
Lubricating Oil, Aircraft Piston Engine (Ashless Dispersant)

PQ Aviation Lubricant 753 (American Oil)
Esso Aviation Oil E-120
Enco Aviation Oil E-120
RM-173E (Mobil)
RM-180E (Mobil)
Aircraft Engine Oil
Premium AD 120 (Texaco)
AeroShell W 120
Esso Aviation Oil A-100
Enco Aviation Oil A-100

Type III

Esso Aviation Oil E-80
Enco Aviation Oil E-80
AeroShell W 80

AT CIVILIAN AIRPORTS...

THESE COMMERCIAL OILS ARE OK

Flying a whirly on a cross-country milk run, or an Ugly 8 on a round-robin is Code 6 duty—unless you have to refill an engine, transmission, or hydraulic oil tank enroute—and don't know what oil to ask for.

No sweat. Just make sure the commercial oil or lube is one listed here. You may not find a MIL SPEC on the containers, but Uncle Sugar guarantees they're equal to the Army brands.

MIL-H-5606
Hydraulic Fluid, Petroleum Base, Aircraft and Ordnance
Manufacturers' Designations

- "PQ" Hydraulic Fluid 4226 (American Oil)
- Brayco 757B
- Brayco 756C
- Brayco 756D
- Brayco 756E
- Castrol Hyspin A
- Univis J41 (Humble)
- Mobil Aero HFB
- Petrofluid 5606B (Pennsylvania)
- Petrofluid 4607 (Pennsylvania)
- Royco 756C (Royal
- Royco 756D (Royal)
- DS-437 (Royal)
- XSL 7828 (Shell)
- PED 3565 (Standard)
- PED 3337 (Standard)
- TL-5874 (Texaco)
- Stauffer Aero Hydroil 500
- YT-283 (Union Carbide)
- FP-221 (Union Carbide)

MIL-L-22851
Type II
Lubricating Oil, Aircraft Piston Engine (Ashless Dispersant)

- PQ Aviation Lubricant 753 (American Oil)
- Esso Aviation Oil E-120
- Enco Aviation Oil E-120
- RM-173E (Mobil)
- RM-180E (Mobil)
- Aircraft Engine Oil Premium AD 120 (Texaco)
- AeroShell W 120
- Esso Aviation Oil A-100
- Enco Aviation Oil A-100

Type III

- Esso Aviation Oil E-80
- Enco Aviation Oil E-80
- AeroShell W 80

MIL-L-7808
Lubricating Oil, Aircraft Turbine Engine, Synthetic Base

- PQ Turbine Oil 8365 (American Oil)
- Esso / Enco Turbo Oil 2389
- RM-184A (Mobil)
- RM-201A (Mobil)
- Shell Aircraft Turbine Oil 307

MIL-L-23699
Lubricating Oil, Aircraft Turbine Engines, Synthetic Base

- PQ Turbine Lubricant 6423 (American Oil)
- PQ Turbine Lubricant 5247 (American Oil)
- PQ Turbine Lubricant 6700 (American Oil)
- PQ Turbine Lubricant 7731 (American Oil)
- PQ Turbine Lubricant 8878 (American Oil)
- PQ Turbine Lubricant 9595 (American Oil)
- 2380 Turbo Oil (WS-6000) (Humble)
- 2395 Turbo Oil (WS-6459) (Humble)
- 2392 Turbo Oil (Humble)
- 2393 Turbo Oil (Humble)
- SATO 7377 (Texaco)
- SATO 7730 (Texaco)
- Castrol 205
- Chevron Jet Engine Oil 5
- STO-21919 (Drew)
- STO-21919A (Drew)
- STO-6530 (Drew)
- HATCOL 3211 (Hatco)
- HATCOL 3611 (Hatco)
- Brayco 899
- Brayco 899-G
- Brayco 899-S
- Stauffer 6924
- Stauffer Jet II
- RM-139A (Mobil)
- RM-147A (Mobil)
- Avrex S Turbo 260 (Mobil)
- Avrex S Turbo 265 (Mobil)
- Royco 899 (C-915) (Royal)
- Royco 899SC (Royal)
- Shell Aircraft Turbine Oil 551
- AeroShell Turbine Oil 500
- AeroShell Turbine Oil 550
- Chevron Jet Engine Oil 5
- TL-8090 (Texaco)

Hold one, AC-types. Before you high-tail it over to the canteen for a cup of Joe while your bird is serviced, be sure you're getting POL from new or clean containers and strainers. Mixing a mineral base lube with synthetic type is a no-no, too.

You can get a refresher course in buying commercial POL items from TB 55-9150-200-25 (Sep 67).

OILS ARE OK

MIL-L-7808
Lubricating Oil, Aircraft Turbine Engine, Synthetic Base

PQ Turbine Oil 8365 (American Oil)
Esso / Enco Turbo Oil 2389
RM-184A (Mobil)
RM-201A (Mobil)
Shell Aircraft Turbine Oil 307

MIL-L-23699
Lubricating Oil, Aircraft Turbine Engines, Synthetic Base

PQ Turbine Lubricant 6423 (American Oil)
PQ Turbine Lubricant 5247 (American Oil)
PQ Turbine Lubricant 6700 (American Oil)
PQ Turbine Lubricant 7731 (American Oil)
PQ Turbine Lubricant 8878 (American Oil)
PQ Turbine Lubricant 9595 (American Oil)
2380 Turbo Oil (WS-6000) (Humble)
2395 Turbo Oil (WS-6459) (Humble)
2392 Turbo Oil (Humble)
2393 Turbo Oil (Humble)
SATO 7377 (Texaco)
SATO 7730 (Texaco)
Castrol 205
Chevron Jet Engine Oil 5
STO-21919 (Drew)
STO-21919A (Drew)
STO-6530 (Drew)
HATCOL 3211 (Hatco)
HATCOL 3611 (Hatco)
Brayco 899
Brayco 899-G
Brayco 899-S
Stauffer 6924
Stauffer Jet II
RM-139A (Mobil)
RM-147A (Mobil)
Avrex S Turbo 260 (Mobil)
Avrex S Turbo 265 (Mobil)
Royco 899 (C-915) (Royal)
Royco 899SC (Royal)
Shell Aircraft Turbine Oil 551
AeroShell Turbine Oil 500
AeroShell Turbine Oil 550
Chevron Jet Engine Oil 5
TL-8090 (Texaco)

Hold one, AC-types. Before you high-tail it over to the canteen for a cup of Joe while your bird is serviced, be sure you're getting POL from new or clean containers and strainers. Mixing a mineral base lube with synthetic type is a no-no, too.

You can get a refresher course in buying commercial POL items from TB 55-9150-200-25 (Sep 67).

MAKE IT A "PAPER" MOD

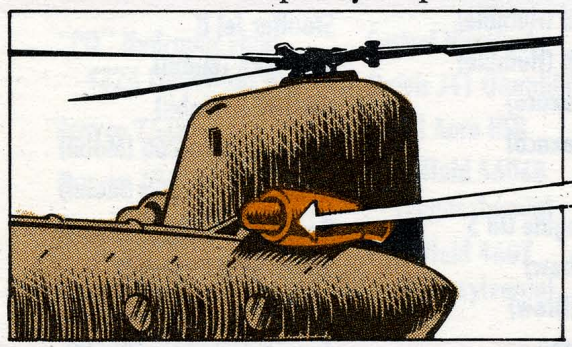
Never head for your aircraft with a drill in your hands, birdmechs, unless you have a good reason — like applying a modification work order.

Some airtypes are always trying to "improve" their equipment without benefit of MWO.

Take the case of the hole drilled in a Chinook (CH-47) engine mount leg to provide a lock wire point for a quick release pin.

The hole was drilled in a primary structure. It added stress and strain in a critical area so the mount had to be changed . . . some "improvement!"

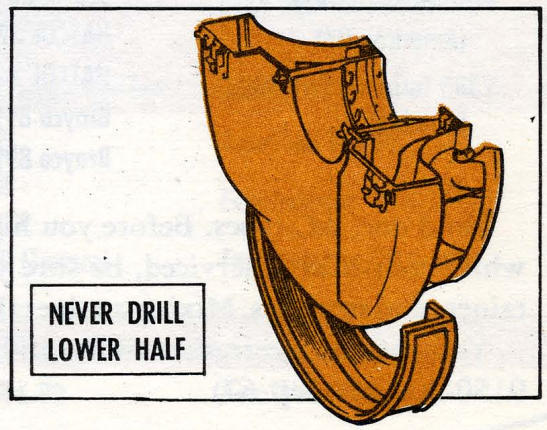
'Course there're plenty of places to secure the quick release pins.



Another common goof is drilling a drain hole in the lower half of the sand and dust separator, FSN 2945-917-7073 (not the self-purging job).

Sure, the unauthorized hole will let out dirt. When flying in the rain it'll even drain trapped water.

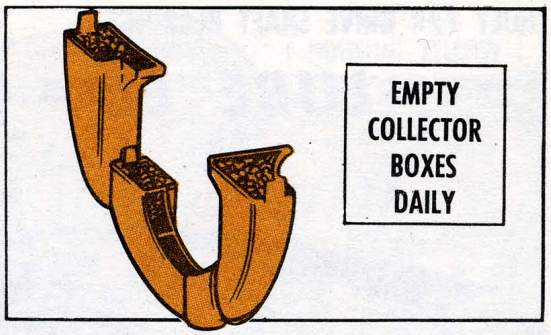
The trouble is, sand and dust come in thru the hole, by-pass the filter and go into the engine.



The result is erosion of the compressor blades, reduced engine life and loss of power.

'Tain't worth it!

The purpose of the particle separator is to collect dirt. Dirt and any trapped water are easily dumped out of the collector boxes during the Daily.

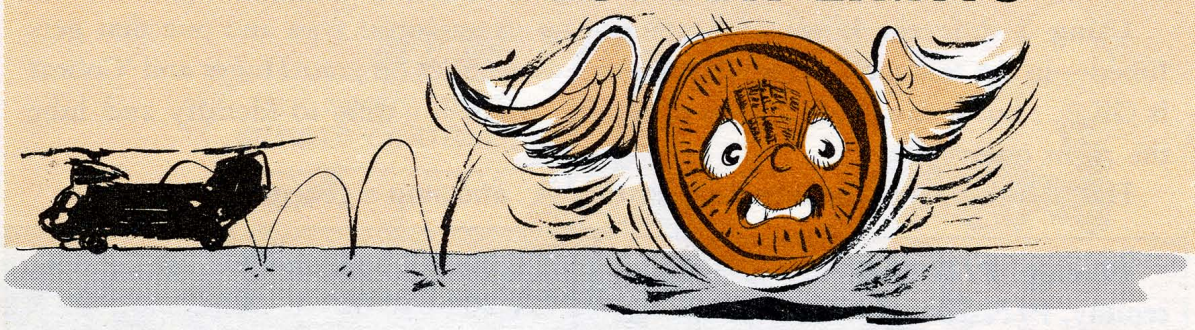


AR 750-35 (Dec 68) has the words on mods. Para 1-4 says alteration of materiel by any organization or activity, except as authorized by that reg and AR 700-35 (Mar 71) on funding, is a no — no.

Make your improvement on paper, birdmechs.

An EIR, DA Form 2407, to the headshed (AVSCOM) may get it on your bird after all, via the MWO route.

FLITTER-FLUTTER LIMITS

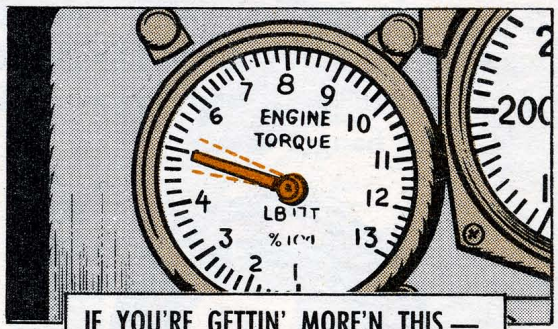


Dear Windy,

Our Chinook maintenance crew and pilots are rapping over how much the torque needles should fluctuate.

TM's say 100 pounds but this seems a lot to us. How do you read the ± needle bit, Windy?

SP5 M. R.



Dear Specialist M. R.,

I read the maximum torquemeter flitter-flutter as ± 50 pounds. If you're getting more'n this better give the torquemeter a checkup.

Like maybe it has a worn or damaged backlash gear in the transmitter, the coupling pin is Murphied, or you don't have the dampening out indicator.

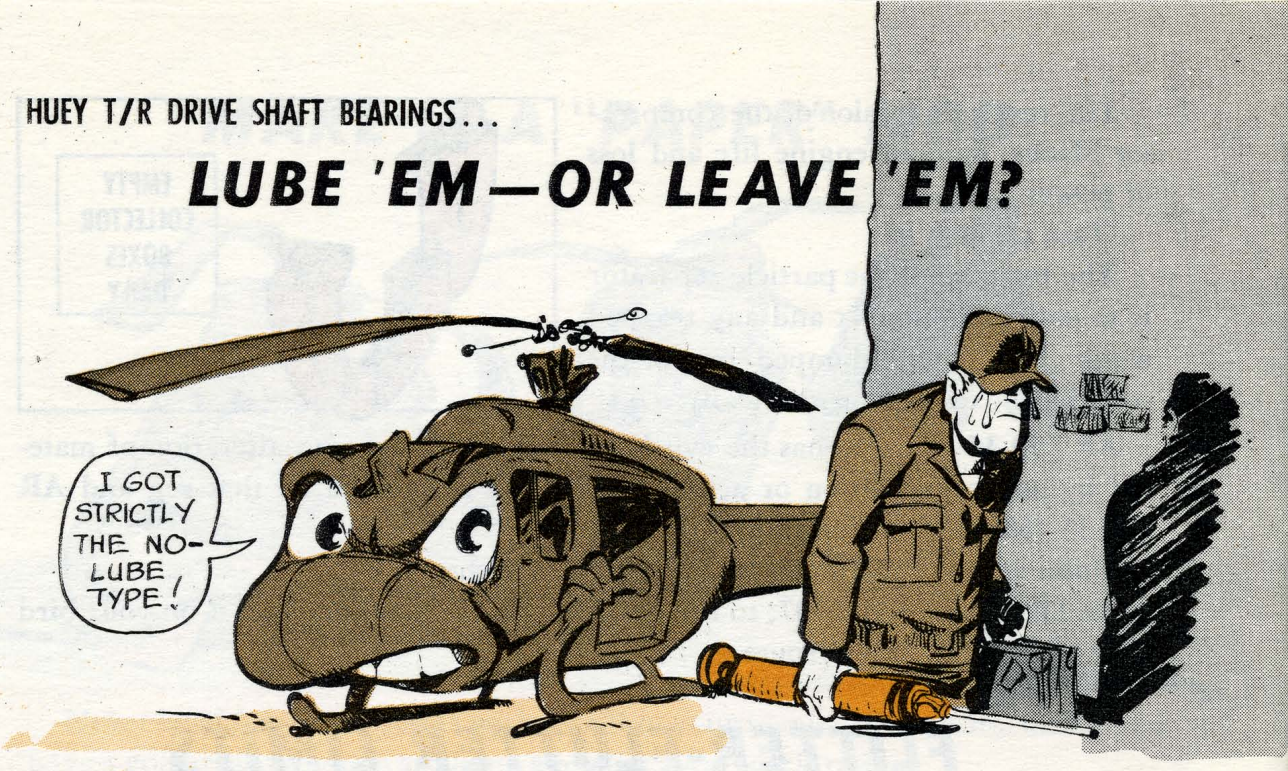
If your bird has one of the old torquemeter indicators, fluctuations can be reduced by taking the corrective actions in Chap 10 of the Dash 20 TM.

The latest indicator, FSN 6620-759-8288, has a dampening device which gets rid of fluctuations.

Windy

HUEY T/R DRIVE SHAFT BEARINGS...

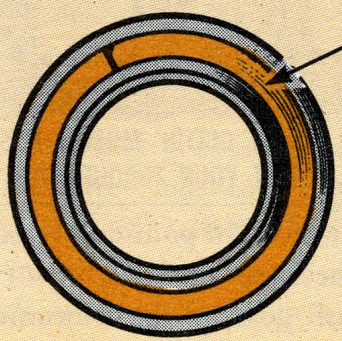
LUBE 'EM—OR LEAVE 'EM?



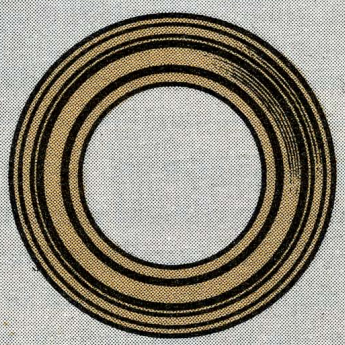
Using 2 different kinds of bearings— a never lubed type and one that gets lubed—in the tail rotor drive shaft hanger assemblies on your Hueys and 'Cobras is OK . . . but it can cause a heap o' trouble when it's time to identify and lube the right ones.

Here's how to spot the lube type bearing . . . and stop a goofup.

Bearing, P/N 204-040-615-3, in assembly, P/N 204-040-600-7, is the one that's lubed with "the needle," according to para 7-125, TM 55-1520-210-20 (May 69). It has a snap ring on each side of the hanger assembly.



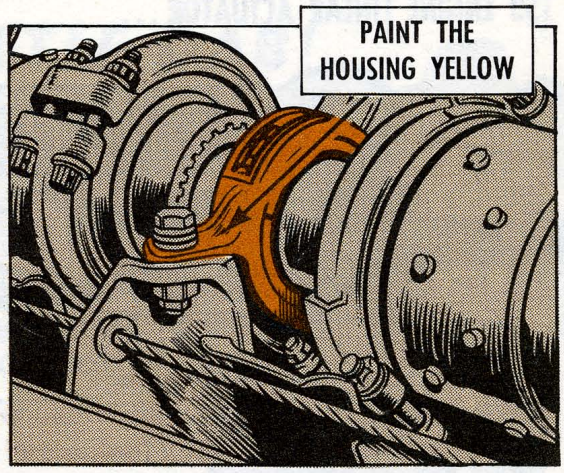
Factory lubed and sealed bearing, P/N 204-040-623-1, in assembly P/N 204-040-600-9, does not have a snap ring a-tall. Never use the needle to grease this bearing because you'll ruin the seal. That means a bearing change . . . extra elbow grease!



While the snap ring bearing is no longer listed in the P-manuals, some may be in the supply system. You may find some of 'em on the same tail boom with the self-lubed bearing—in your Huey fleet.

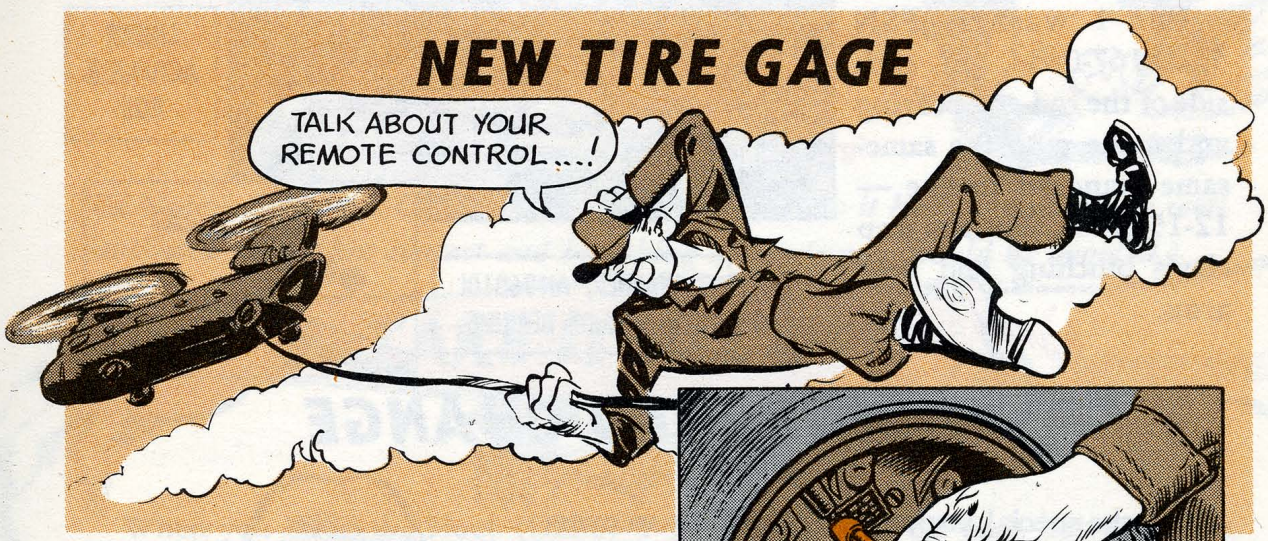
Until you replace the old bearing, get an OK from the MO to paint the bearing housing YELLOW—a reminder that the bearing gets a periodic shot of grease.

When you replace the snap ring type with the new bearing, be sure you renumber the bearing housing assembly, from a —7 to a —9. Restamping will do just fine. Make sure you remove the yellow paint!



Your Huey PMD calls for a damage and security check on the tail rotor shafts, hangers, clamps and covers plus an inspection for grease leakage on all tail rotor shaft couplings . . . no sweat.

It would be a shame to ruin a bearing with a shot of grease, tho, 'specially one that doesn't need it!

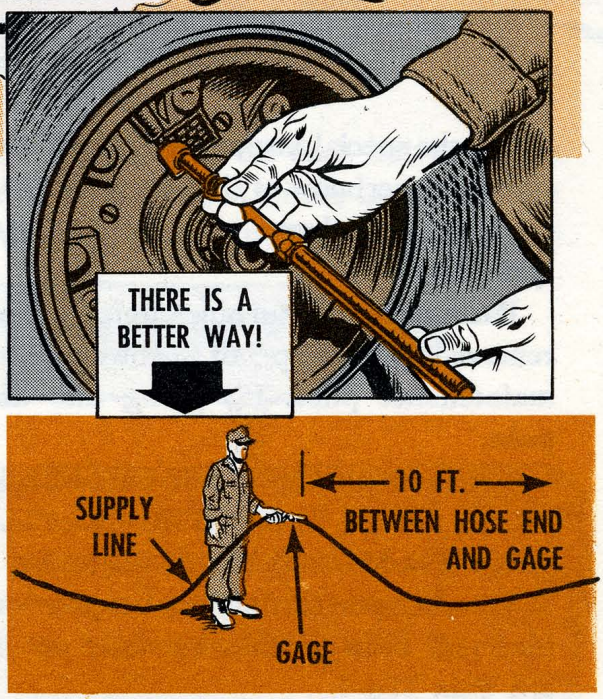


There's a remote control safety chuck gage, FSN 4920-781-8423, in the works for use on high pressure aircraft tires, birdmen.

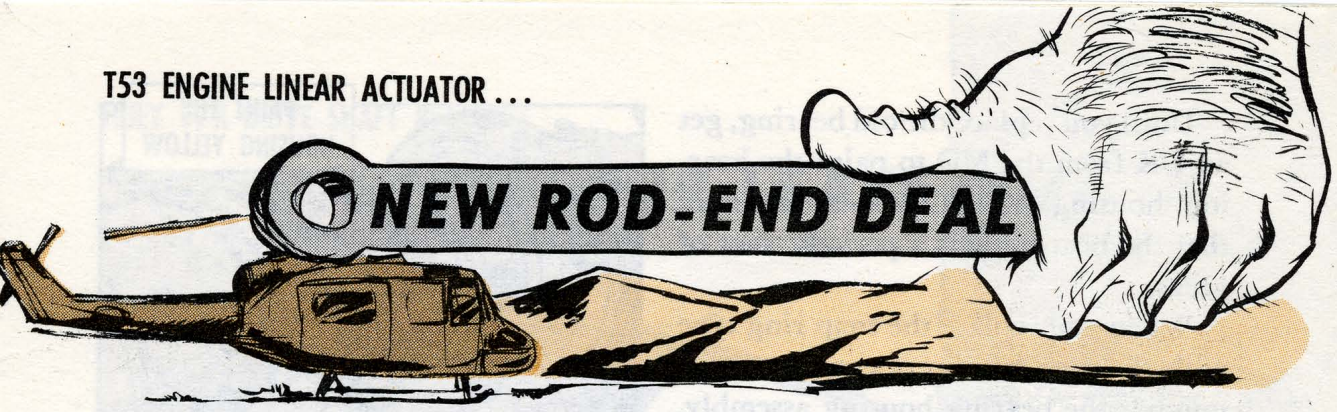
With it you can deflate, inflate and check tire pressure at a safe distance—in case the tire should go POW!

The gage is being added to the special tools section of the -20P manuals for these birds—OV-1, U-21, UH-19, CH-34, CH-37, CH-47 and CH-54.

The pub will be your authority to get one.



T53 ENGINE LINEAR ACTUATOR . . .



Dear Windy,

I've always used finger-tight torque when tightening the bolt connecting the linear actuator rod-end to the Huey's fuel control unit.

But if the bolt pinches the clevis against the rod-end and the actuator is moved, the arm is bent and could break in flight. If the bolt is too loose you won't get any force on the arm.

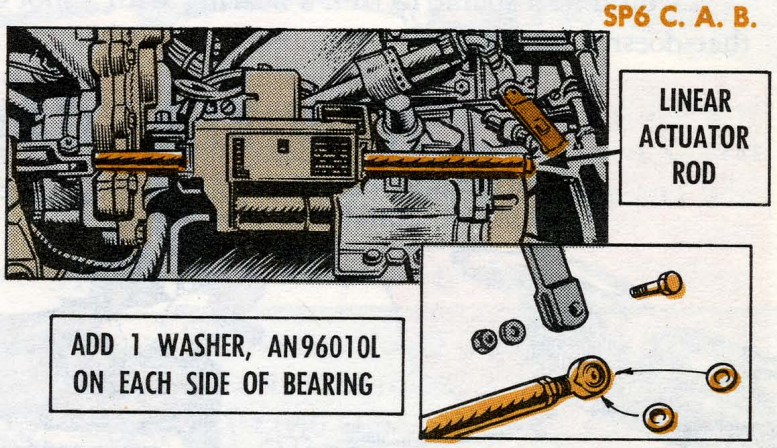
What's the correct installation, Sarge?

SP6 C. A. B.

Dear Specialist C. A. B.,

Put 1 washer, FSN 5310-167-0834, on each side of the rod-end bearing and make with the same-same standard torque — 12-15 in-lbs. Washers stop clevis pinching and bent arms.

Windy



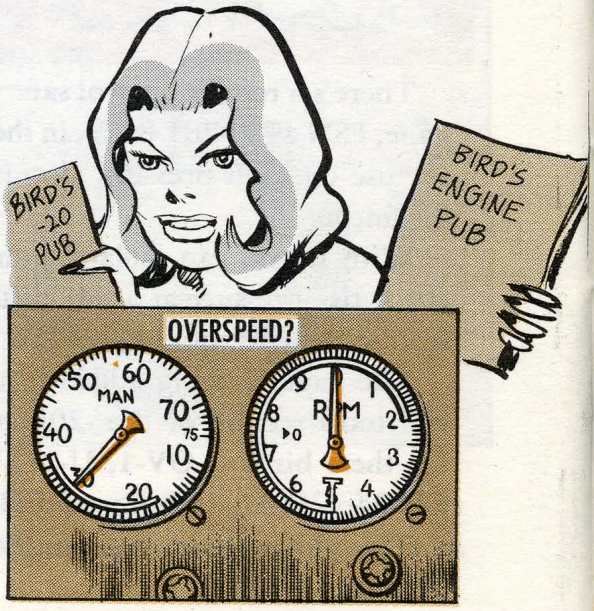
ENGINE INFO CHANGE

For the special inspection "word" on an overspeed or overboost of the Otter (U-1A) R-1340-61 engine, birdmen, eye TM 55-2810-223-24 (Jul 70).

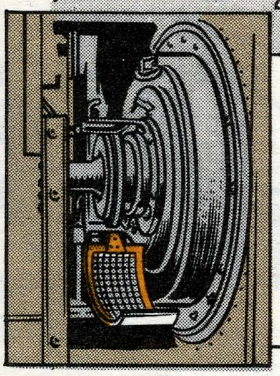
Basic recip and turbine engine poop is being removed from Chap 5 of the bird organizational maintenance pubs. It's going into the engine pubs.

The same transfer of info has also taken place on the Beaver (U-6A) R985-39A. The engine pub is TM 55-2810-224-24 (Oct 70).

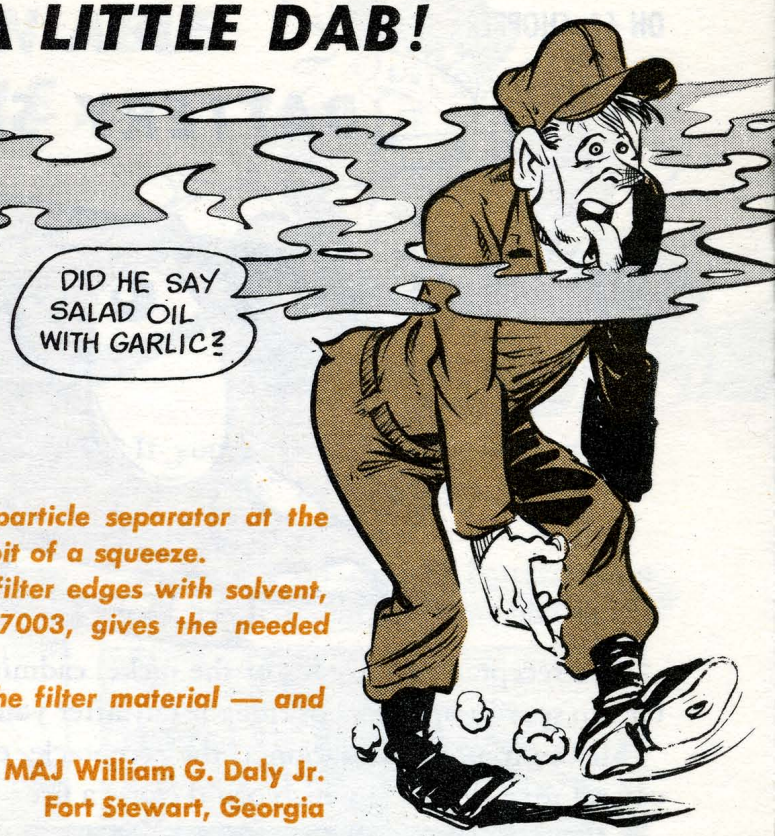
So, when you can't find what you want in the bird pub latch on to the engine pub, listed in DA Pam 310-4.



JUST A LITTLE DAB!



COATING THE FILTER EDGES WITH SOLVENT GIVES IT A LITTLE "SLIDE"



Dear Editor,

Inserting the air filter into the particle separator at the Huey (UH-1) engine inlet can be a bit of a squeeze.

We found, tho, that coating the filter edges with solvent, trichlorethylene, O-T-634 or MIL-T-7003, gives the needed slip and slide to make it a breeze.

The solvent doesn't decompose the filter material — and never leaves residue to collect dirt.

MAJ William G. Daly Jr.
Fort Stewart, Georgia

(Ed Note—Right on. Of course the solvent is toxic so it has to be used in a well ventilated area. Skin contact and breathing of the fumes should be avoided.)

TAKE IT ALL OFF!

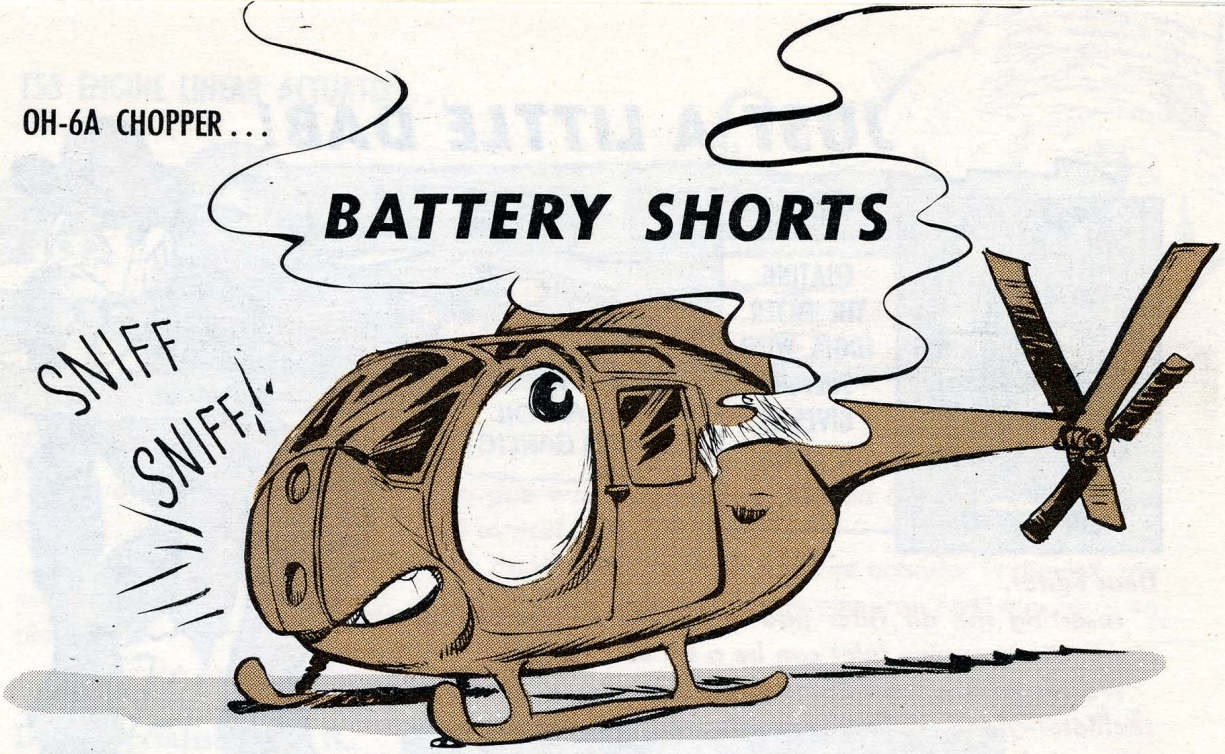
When you clean the Huey (UH-1) T-53 engine, take off both halves of the particle separator, knucklebusters. If you do your thing with the upper airfilter off and the lower airfilter on, only half the engine inlet will get cleaned.

LESS MAINTENANCE

Don't sweat the 100-hr hydraulic and pneumatic filter element change listed in the Mohawk (OV-1) organizational maintenance pub, mechs. Do your thing every 3rd Periodic, as called for in TM 55-1510-204-20PMP (Oct 70) . . . sequence 1.19.

OH-6A CHOPPER . . .

BATTERY SHORTS



The receptacle and leads of the nickel cadmium batteries in your OH-6A 'copter can set you up for a hot ride the day after you get lazy with the PM.

Meaning, poor insulation at the receptacle, electrolyte spill and high moisture can set up a short . . . which could cause a fire.

1. Moisture sets up the short by seeping through bad or broken insulation . . . either on the leads or at the receptacle.

2. Electrolyte spill sets up the same bit.

Wot to do? Be sure that the receptacle back and leads are epoxy coated . . . or get it done by your support. TB 750-911-3 (Apr 70), pages 7 and 8, tells 'em how.

Two good ways to cut down hazards from the No. 2 problem area — electrolyte spill — is a proper voltage regulator setting and careful electrolyte fill.

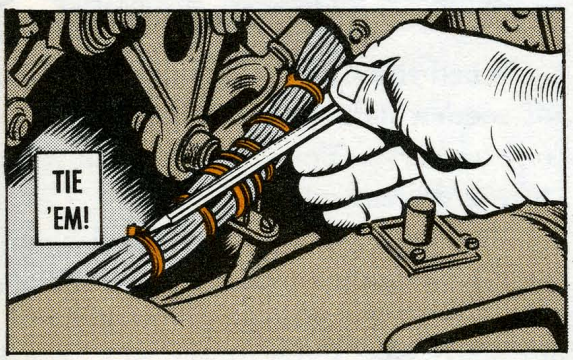
Whether your problem is with the BB-641/A or BB-678/A battery, TM 11-6140-203-15-2 (Dec 69) gives you a chart on page 3-5, para 3-4c, which tells you the regulator setting for the weather you're getting.

Paras 4-11 and 4-12 on page 4-4 of the above TM clue you on the best way to adjust the electrolyte to prevent a lot of spewage. And when it does spew, clean up the goo.

FOR AN ABLE CABLE . . .

Is the dangle angle of your avionics cables leading to a tangle mangle?

Then, tie 'em, Clem.

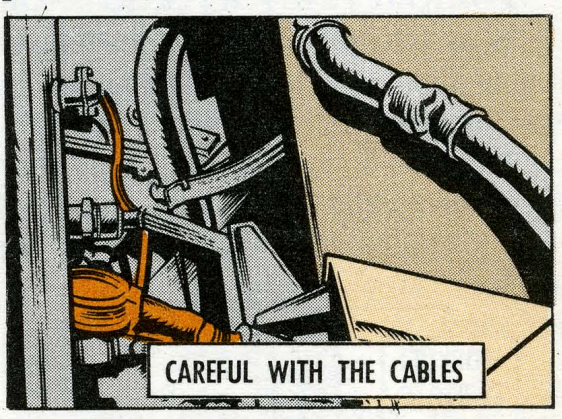


Easiest way to avoid dangle anguish is to re-tie any cable or wiring spot ties you remove, break, or otherwise disturb.

Next, of course, is to put 'em where they're needed. That goes for dangling connectors looking for a place to rest —as well as cables. Saves damage, binding of controls . . . and you name it.

If you have the plastic ties, it's no work at all. Twine might take a few seconds longer.

Big point on cables: batteries can pinch 'em, cut 'em, or short 'em out if

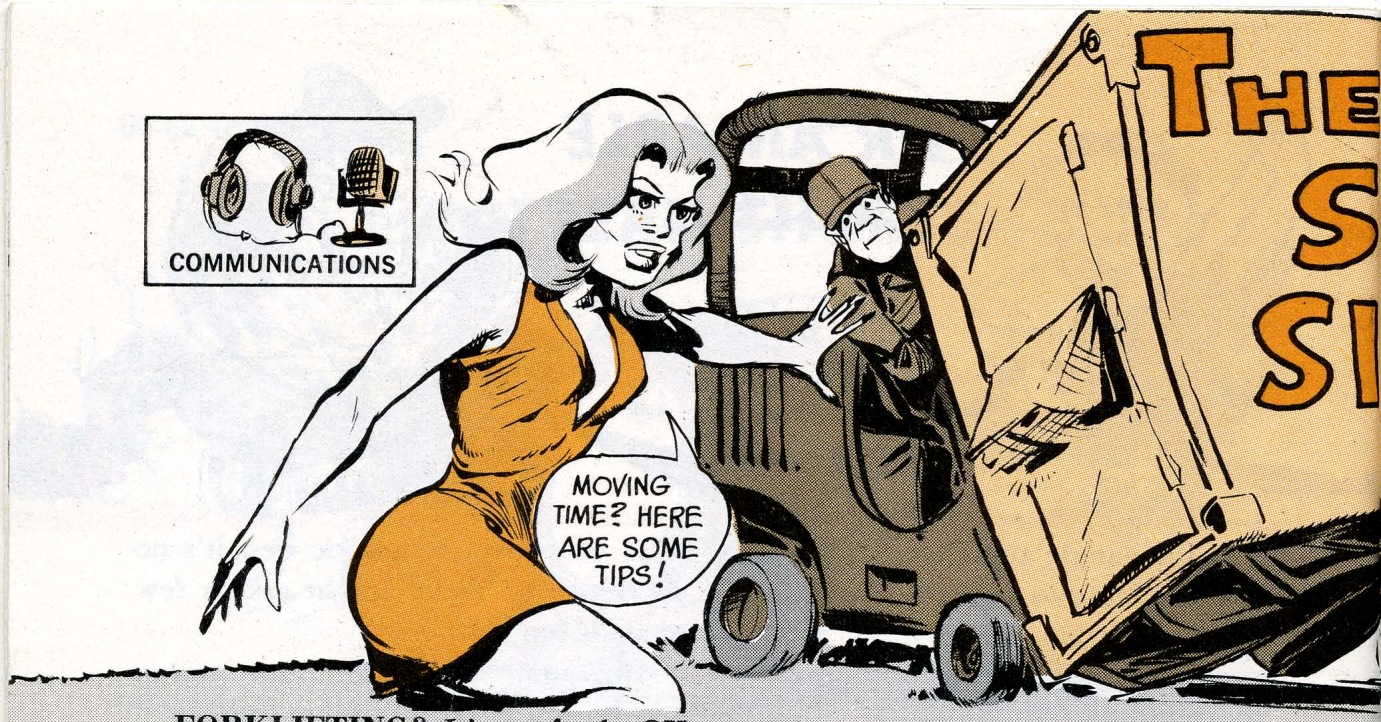


you accidentally set 'em down on cabling. That's even more so with the antenna cables in the UH-1 aircraft.

Be careful when you set the battery in place . . . to be sure you haven't caught a cable.

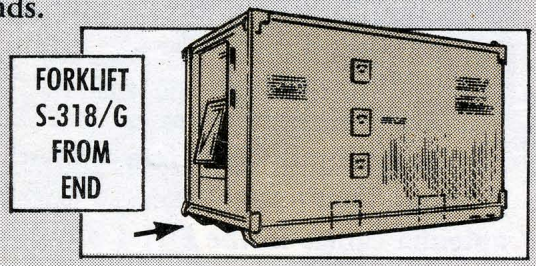
CARGO SAVER

If you're in the external air delivery business, take a peek at Ch 1 (20 Aug 70) to TM 55-1670-259-20. A questionable 15,000-lb capacity sling now has to be inspected by an MOS 43E parachute rigger . . . prevents supplies being turned into scrap due to an unscheduled let down!



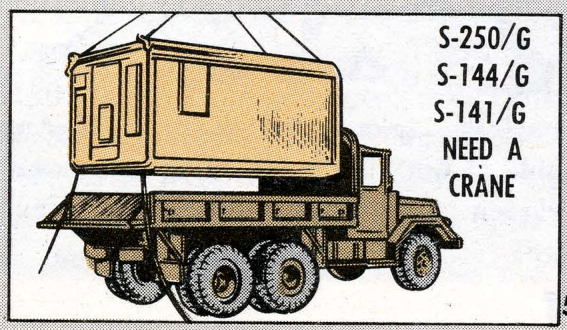
FORKLIFTING? It's perfectly OK on some of the newer electrical equipment shelters—but you've gotta be careful how you handle it.

F'rinstance, the S-280/G type shelters take forklifting from the sides, and the S-318/G type shelters from the ends.



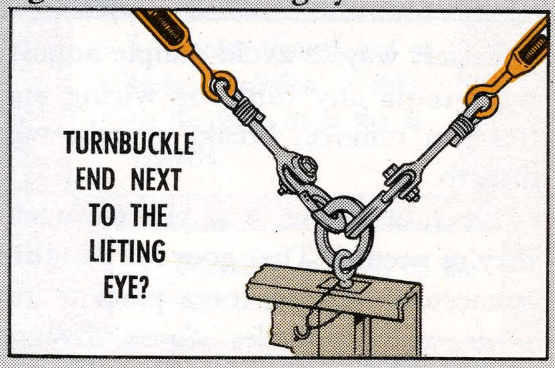
But, if you forklift from the wrong places, you could bash, bend, bang or break your shelter.

Keep in mind that some shelters, like the S-250/G, S-144/G and S-141/G, just weren't made for forklifting. They take a crane or boom.

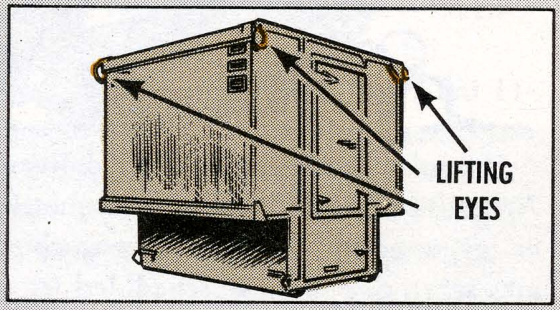


When you sling-lift a shelter, beware of sudden jerks or swinging while it's on the move. This could tear out the lifting-eye assemblies.

Make sure you use the right sling assembly with the turnbuckle end of each leg next to the lifting-eye.

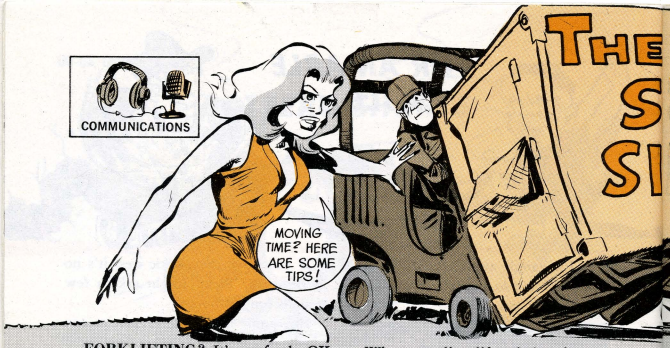


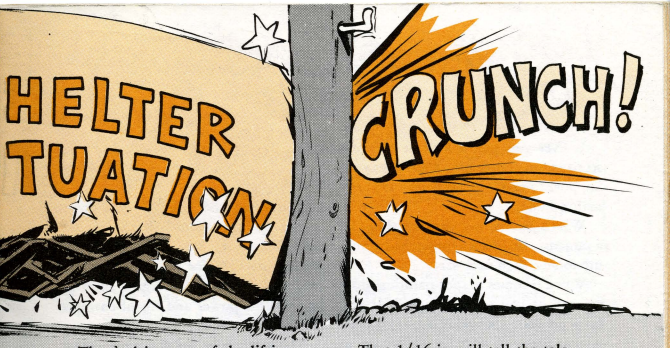
THOSE LIFTING-EYES on the S-318 can break during the lifting operation—and it won't necessarily be any fault of yours.



COMMUNICATIONS

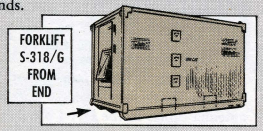
THE SHELTER SITUATION





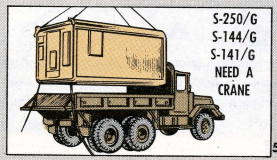
FORKLIFTING? It's perfectly OK on some of the newer electrical equipment shelters—but you've gotta be careful how you handle it.

F'rinstance, the S-280/G type shelters take forklifting from the sides, and the S-318/G type shelters from the ends.



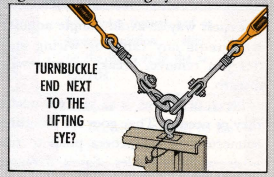
But, if you forklift from the wrong places, you could bash, bend, bang or break your shelter.

Keep in mind that some shelters, like the S-250/G, S-144/G and S-141/G, just weren't made for forklifting. They take a crane or boom.

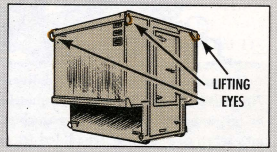


When you sling-lift a shelter, beware of sudden jerks or swinging while it's on the move. This could tear out the lifting-eye assemblies.

Make sure you use the right sling assembly with the turnbuckle end of each leg next to the lifting-eye.



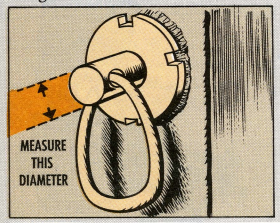
THOSE LIFTING-EYES on the S-318 can break during the lifting operation—and it won't necessarily be any fault of yours.



The deal is, some of the lifting-eyes on the S-318 are weaker than they oughta be, and they won't do the job.

Here's how to find out whether you've got an S-318 with faulty lifting-eyes:

Measure the stud diameter of the eyes. The faulty studs will come out 11/16 inch, with the newer studs measuring 3/4 inch.



That 1/16-in will tell the tale.

Also, if you try to fit an 11/16th-in wrench over the stud diameter, it will fit only if you have the faulty lifting-eyes.

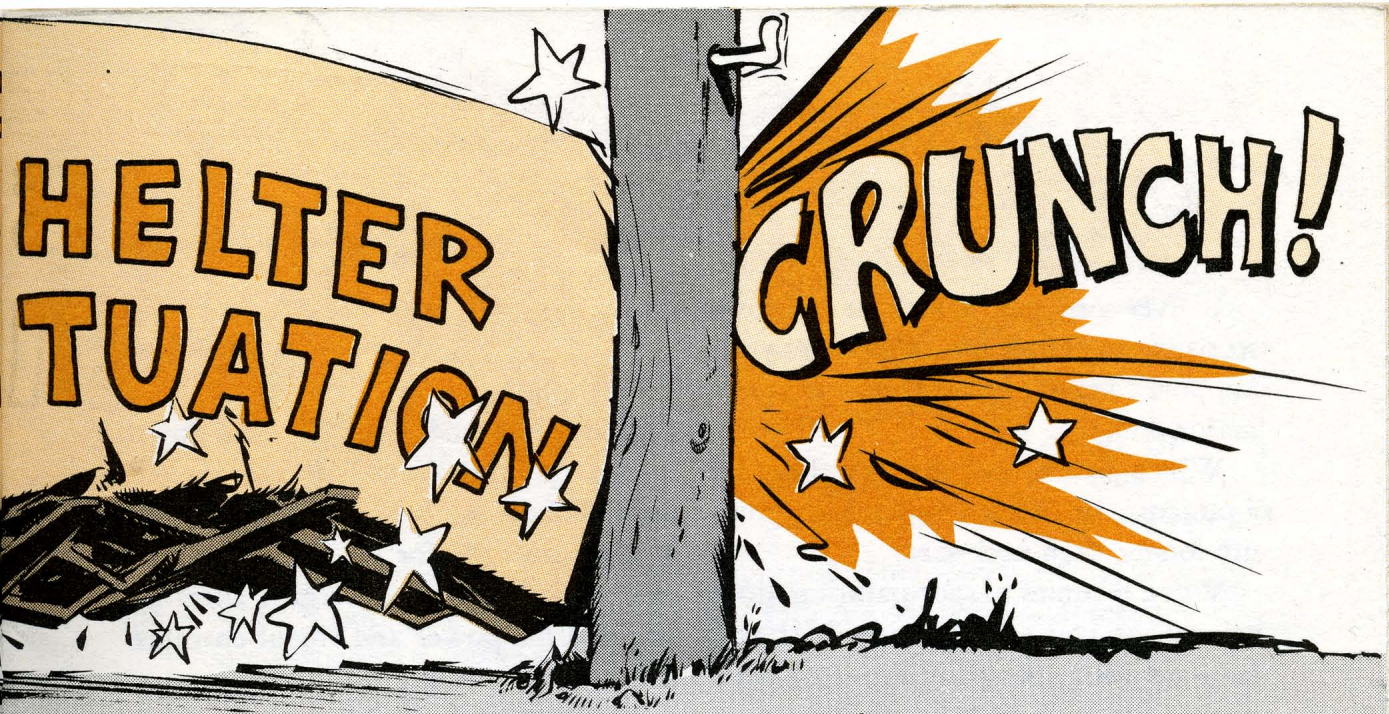
Or use an adjustable wrench set to an 11/16th-in opening.

If you do have the faulty lifting-eyes, contact your direct support about replacing the eye assembly.

THE WORD'S on page 32 of TB 750-911-3 (Apr 70). Better check all your S-318's... you'll save lotsa trouble that way.

TB 750-240 (Jul 69) has the scoop on PM for your shelters, including tips on lifting.

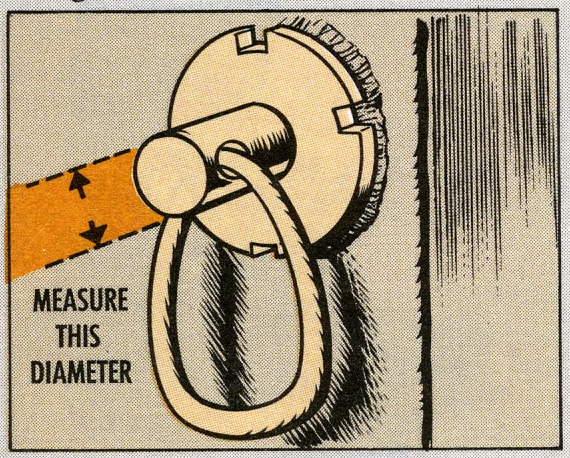
PS MORE



The deal is, some of the lifting-eyes on the S-318 are weaker than they oughta be, and they won't do the job.

Here's how to find out whether you've got an S-318 with faulty lifting-eyes:

Measure the stud diameter of the eyes. The faulty studs will come out 11/16 inch, with the newer studs measuring 3/4 inch.



That 1/16-in will tell the tale.

Also, if you try to fit an 11/16th-in wrench over the stud diameter, it will fit only if you have the faulty lifting-eyes.

Or use an adjustable wrench set to an 11/16th-in opening.

If you do have the faulty lifting-eyes, contact your direct support about replacing the eye assembly.

THE WORD'S on page 32 of TB 750-911-3 (Apr 70). Better check all your S-318's . . . you'll save lotsa trouble that way.

TB 750-240 (Jul 69) has the scoop on PM for your shelters, including tips on lifting.

P.S MORE

If ever you spot a leak or moisture seepage, no matter how small, get your Support to check it out before it causes major damage.

Which means, too, that you don't let a puncture or leak go unpatched a minute longer than necessary.

When it comes to spot-painting, do it as soon as you see it's needed. If you keep up your spot-painting—no postponements—there'll be no reason to have a full paint job later at a higher level of support. TB 750-240 (Jul 69) has the word on spot-painting.

IF YOU NEED to replace the rubber matting on the shelter floor, eyeball the good word on page 39 of TB 750-240.

Don't lose the knurled hold-down screws on the front of the shelter door, like on the S-178( )/MRC-69(v). There's no FSN for the screws, which secure the binding post signal entrance box and the power and signal entrance box.

The same goes for the wingscrews, where they're used on other models; no FSN's for these, either.

There's a small retaining washer that holds the screws, but if the washer is missing, the screws can release completely and be lost or mislaid. Take care.

Q-4A RADOME PROTECTOR

Need a good raincoat for the radome of your AN/MPQ-4A radar set?

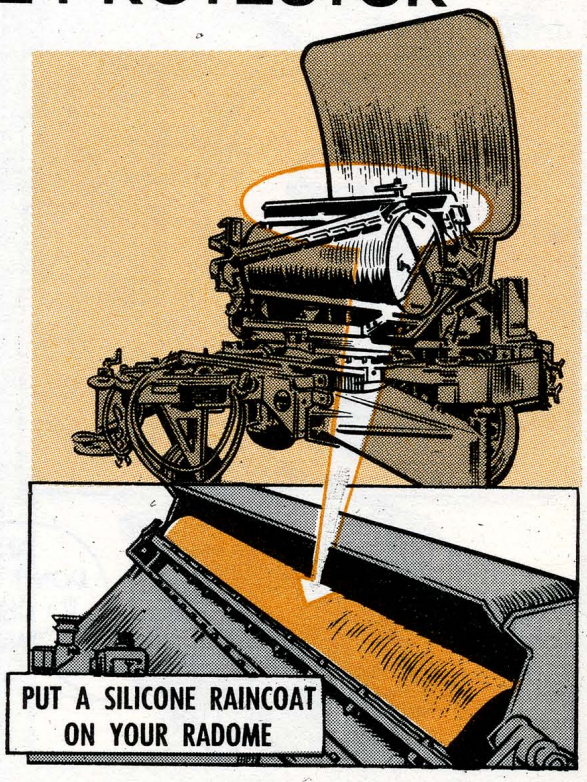
FSN 5970-843-2916 will get you a 1-pt can of a new silicone coating which cuts RF loss caused by rain water.

Ain't that swift?

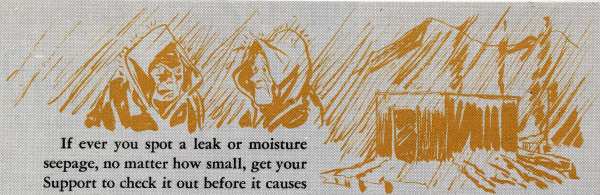
The new, clear coating is being added to TM 11-5840-208-20P.

Before you apply the silicone, clean the radome with soap and water or cleaning compound FSN 6810-664-0273. Get it really dry, and put on 1 coat of the compound with a paint brush.

Clean and re-coat the radome every 3 months in moderate climates . . . and more often if your location requires it (like long rainy seasons, etc.).



PUT A SILICONE RAINCOAT ON YOUR RADOME



If ever you spot a leak or moisture seepage, no matter how small, get your Support to check it out before it causes major damage.

Which means, too, that you don't let a puncture or leak go unpatched a minute longer than necessary.

When it comes to spot-painting, do it as soon as you see it's needed. If you keep up your spot-painting — no postponements — there'll be no reason to have a full paint job later at a higher level of support. TB 750-240 (Jul 69) has the word on spot-painting.

IF YOU NEED to replace the rubber matting on the shelter floor, eyeball the good word on page 39 of TB 750-240.

Don't lose the knurled hold-down screws on the front of the shelter door, like on the S-178( )/MRC-69(v). There's no FSN for the screws, which secure the binding post signal entrance box and the power and signal entrance box.

The same goes for the wingscrews, where they're used on other models; no FSN's for these, either.

There's a small retaining washer that holds the screws, but if the washer is missing, the screws can release completely and be lost or mislaid. Take care.

Q-4A RADOME PROTECTOR

Need a good raincoat for the radome of your AN/MPQ-4A radar set?

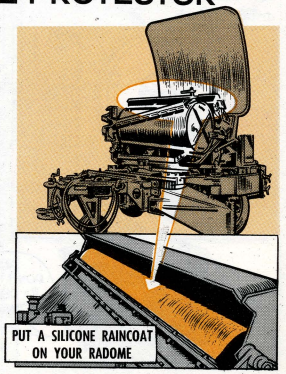
FSN 5970-843-2916 will get you a 1-pt can of a new silicone coating which cuts RF loss caused by rain water.

Ain't that swift?

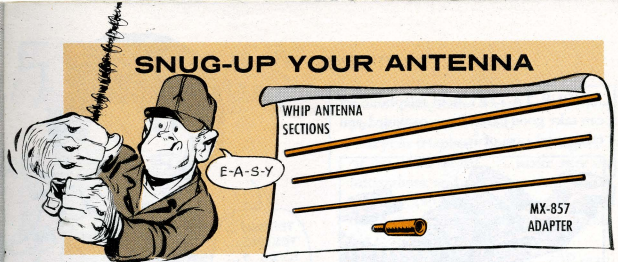
The new, clear coating is being added to TM 11-5840-208-20P.

Before you apply the silicone, clean the radome with soap and water or cleaning compound FSN 6810-664-0273. Get it really dry, and put on 1 coat of the compound with a paint brush.

Clean and re-coat the radome every 3 months in moderate climates . . . and more often if your location requires it (like long rainy seasons, etc.).



SNUG-UP YOUR ANTENNA



Workin' with the AN/GRA-4 antenna group? Then, take pains to screw the MS-116( ) whip antenna section snugly into the MX-857/adapter.

A loose fit between the section and adapter can mean the antenna might not load, and you'd have to pull the T-195 transmitter so a repairman could dig deep for the trouble.

That's unnecessary down-time, man — when all that section needed was a snug-up.

ANTENNA IN A BIND?

Dear Half-Mast,

There's a hang-up FSN-wise on the silicone compound to use for threads on antenna sections. Could you get the word out about the right slick-em to use on antennas to keep 'em from binding.

SFC L.H.B.

Dear Sergeant L. H. B.,

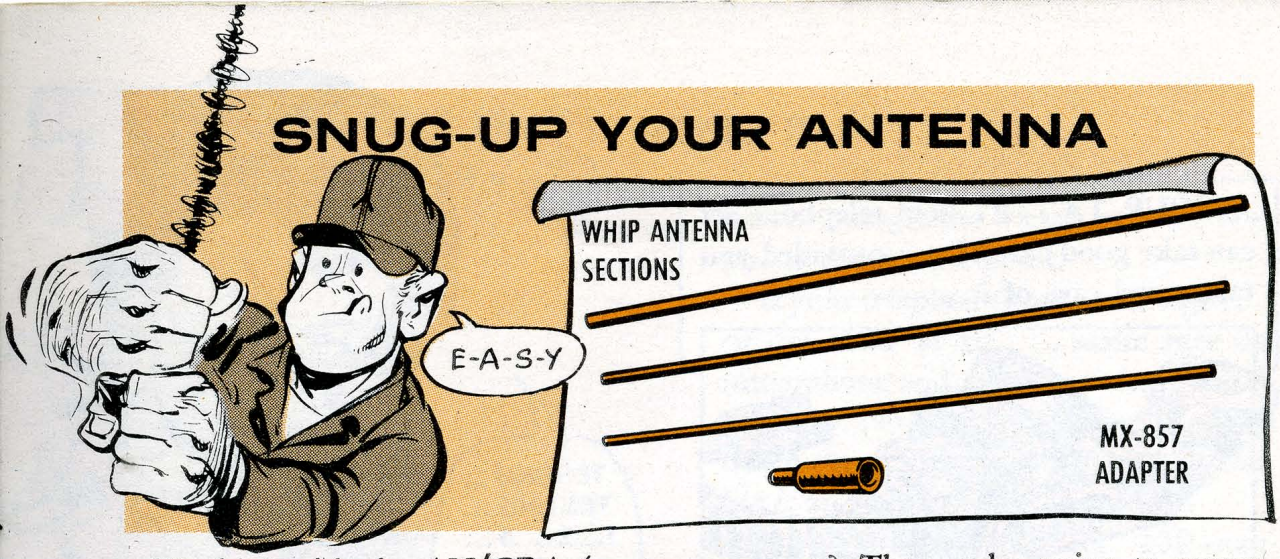
Sure thing. The current favorite, recommended by the head shed, is an 8-oz tube of silicone grease, FSN 9150-257-5358.

It won't corrode and is a non-conductor. Therefore, apply it lightly so's not to disturb the conducting surface of the antenna sections. Just a dab'll do it . . . on the male threads.

Insulating silicone compound, FSN 6850-880-7616, (8-oz tube) is still the best bet to keep O-rings in place, water out, etc. Keep it off the electrical contacts. But use the other stuff on the antennas.

Half-Mast

SNUG-UP YOUR ANTENNA



Workin' with the AN/GRA-4 antenna group? Then, take pains to screw the MS-116( ) whip antenna section snugly into the MX-857 adapter.

A loose fit between the section and adapter can mean the antenna might not load, and you'd have to pull the T-195 transmitter so a repairman could dig deep for the trouble.

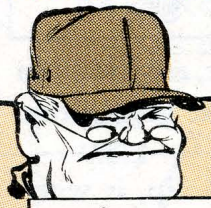
That's unnecessary down-time, man — when all that section needed was a snug-up.

ANTENNA IN A BIND?

Dear Half-Mast,

There's a hang-up FSN-wise on the silicone compound to use for threads on antenna sections. Could you get the word out about the right slick-em to use on antennas to keep 'em from binding.

SFC L.H.B.



Dear Sergeant L. H. B.,

Sure thing. The current favorite, recommended by the head shed, is an 8-oz tube of silicone grease, FSN 9150-257-5358.

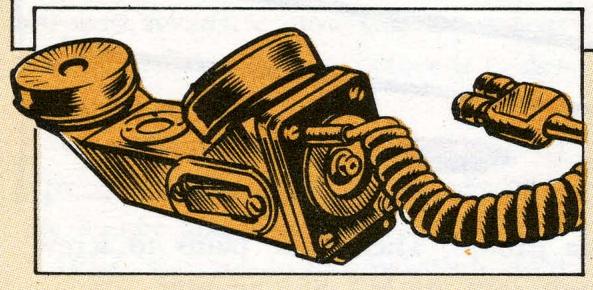
It won't corrode and is a non-conductor. Therefore, apply it lightly so's not to disturb the conducting surface of the antenna sections. Just a dab'll do it . . . on the male threads.

Insulating silicone compound, FSN 6850-880-7616, (8-oz tube) is still the best bet to keep O-rings in place, water out, etc. Keep it off the electrical contacts. But use the other stuff on the antennas.

Half-Mast

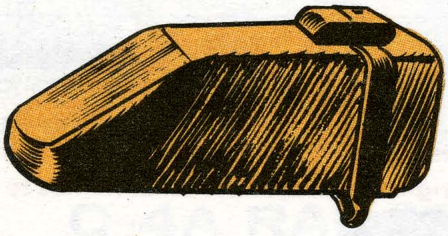
TA-1/PT TELEPHONE SET

YOUR TA-1/PT field telephone set can take good care of you provided you take good care of it.



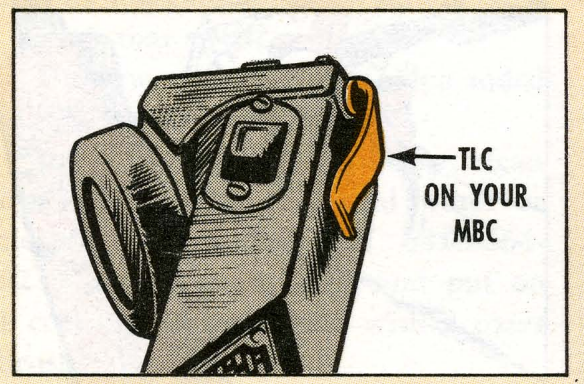
Here's how:

That hard plastic case for the TA-1 is rugged, but it can be busted by a drop or bang.



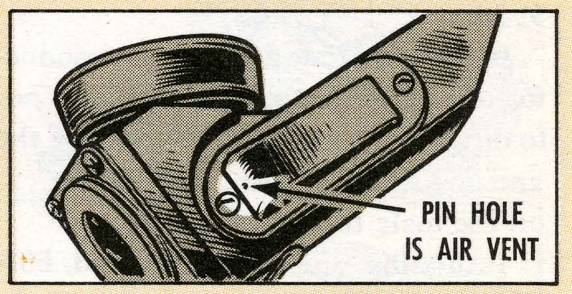
So-o-o-o, gentle-hand it, especially in cold weather when the case gets brittle.

About that metal belt clip, it won't stay good long if you force it over a tree branch, thick cord or wire—or anything else that's thicker than the belt it's supposed to fit.



A replacement clip has to be cannibalized or made by support. There's no stock number.

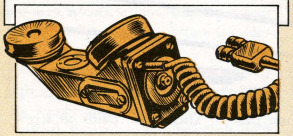
That pin-sized hole in the end of the PRESS-TO-TALK switch cover or the generator lever cover is s'posed to be there. It's an air vent.



These rubber covers can be worn through by repeated finger pressure. They keep out dust and moisture.

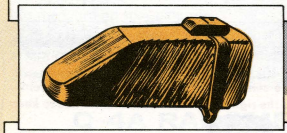
TA TACTICS

YOUR TA-1/PT field telephone set can take good care of you provided you take good care of it.



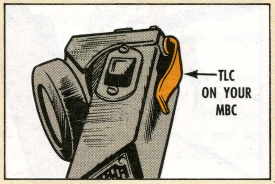
Here's how:

That hard plastic case for the TA-1 is rugged, but it can be busted by a drop or bang.



So-o-o-o, gentle-hand it, especially in cold weather when the case gets brittle.

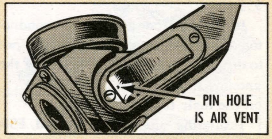
About that metal belt clip, it won't stay good long if you force it over a tree



branch, thick cord or wire — or anything else that's thicker than the belt it's supposed to fit.

A replacement clip has to be cannibalized or made by support. There's no stock number.

That pin-sized hole in the end of the PRESS-TO-TALK switch cover or the



generator lever cover is s'posed to be there. It's an air vent.

These rubber covers can be worn through by repeated finger pressure. They keep out dust and moisture.

Use electrical tape, plastic tape, or even adhesive tape, to make a cushion between the cover and the P-T-T switch.

Just wind the tape around the switch.

Never haul your TA-1 around by the curly-cord. You can break the insulation or mangle the wiring near the telephone connection point.

If your telephone's not actin' right . . . or not actin' at all . . . make sure the microphone and earphone elements are gung-ho. No use loadin' support with a down-timed TA-1 when the only trouble is an element you can replace.

Both elements are in the -20P manual.

Treat the moisture shields right. Without 'em, moisture, dirt and dust

can put your TA on shop-time.

Be especially careful with the mike shield. All that protects it is your care.

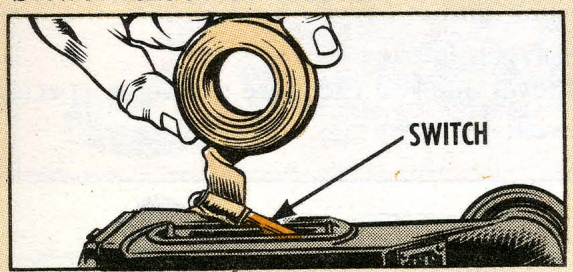
A pen, pencil, paper clip, finger . . . lotsa things can puncture it.

When you want to case the TA-1, put the cord and connector between the

transmitter and receiver. This'll get 'em outta harm's way. Any left-over cord can be coiled around the top of the phone.

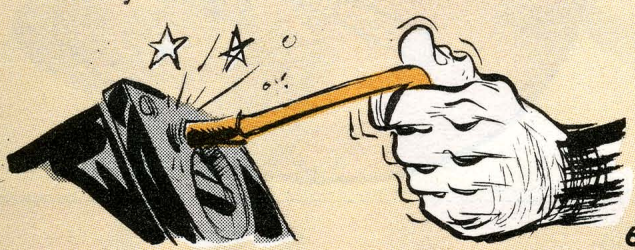
A TACTICS

Use electrical tape, plastic tape, or even adhesive tape, to make a cushion between the cover and the P-T-T switch.



Just wind the tape around the switch.

Never haul your TA-1 around by the curly-cord. You can break the insulation or mangle the wiring near the telephone connection point.



If your telephone's not actin' right . . . or not actin' at all . . . make sure the microphone and earphone elements are gung-ho. No use loadin' support with a down-timed TA-1 when the only trouble is an element you can replace.

Both elements are in the -20P manual.

Treat the moisture shields right. Without 'em, moisture, dirt and dust

can put your TA on shop-time.

Be especially careful with the mike shield. All that protects it is your care.

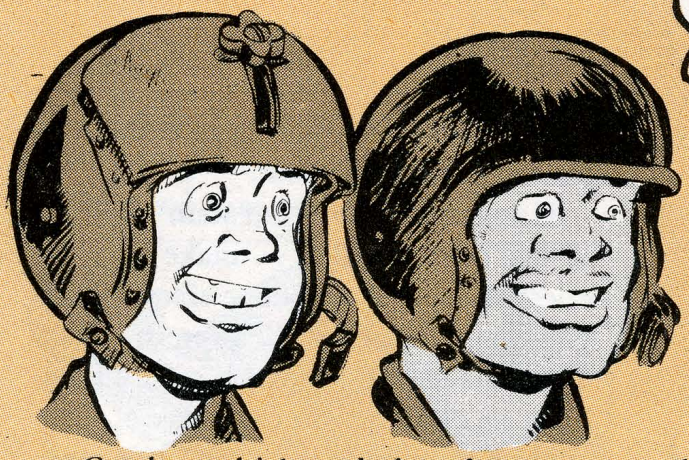
A pen, pencil, paper clip, finger . . . lotsa things can puncture it.

When you want to case the TA-1, put the cord and connector between the

transmitter and receiver. This'll get 'em outta harm's way. Any left-over cord can be coiled around the top of the phone.

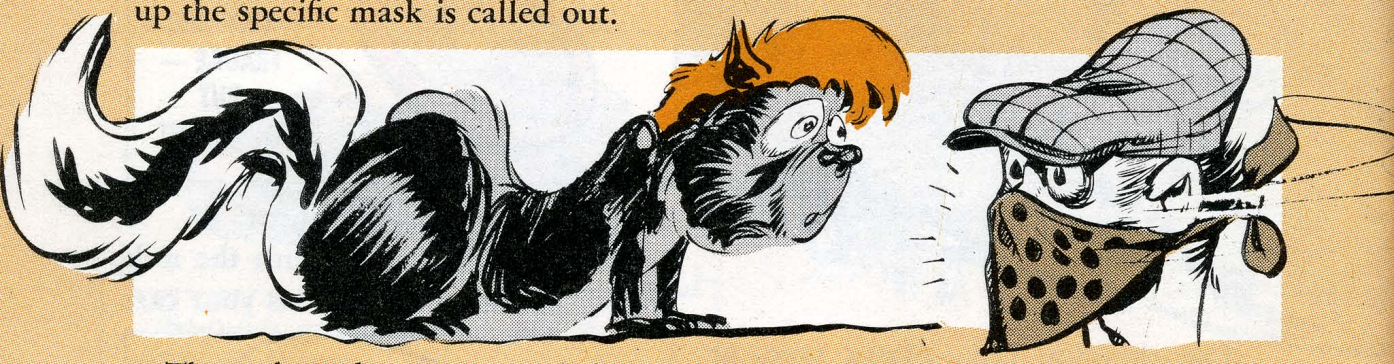
FOR CV CREWS AND FLYING TYPES . . .

PROT MASK



Combat vehicle and aircraft crewmen — this chemical-biological mask inspection check-list is for you.

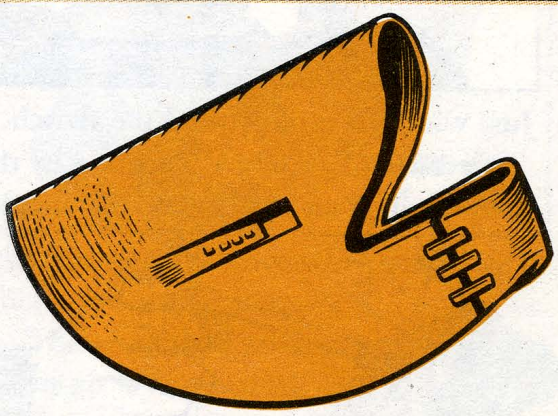
It covers the M14A2, M25 and M25A1 tank masks, and the M24 aircraft mask. Except for minor changes in design, different microphone assemblies, and a change or so in their components and accessories, the masks are practically one and the same — so the scoop applies across-the-board. Where the difference shows up the specific mask is called out.



The tank masks operate on their own canisters (in or out of the carrier), or they can be hooked into a vehicle's gas particulate filter unit. The aircraft mask works on its own canister (in or out of the carrier), and it can be hooked into the aircraft's oxygen system, or into a bailout oxygen bottle.

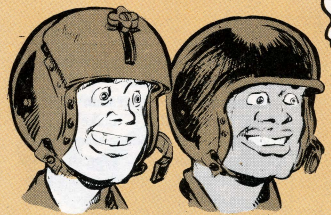
Before you close-in on your mask, whichever one you use, here are some special PM pointers that'll save you a lot of sweat —

1. Never store your mask without its fibreboard faceform. If the faceform's missing or damaged use crushed newspaper (or any other soft paper) inside the facepiece, before you store or turn-in the mask. Without the faceform, or some kind of support, the faceblank and the eyelens will be distorted by permanent set.



FOR CV CREWS AND FLYING TYPES...

PROTECTIVE MASK CARE



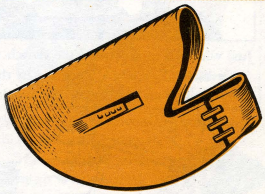
Combat vehicle and aircraft crewmen — this chemical-biological mask inspection check-list is for you.

It covers the M14A2, M25 and M25A1 tank masks, and the M24 aircraft mask. Except for minor changes in design, different microphone assemblies, and a change or so in their components and accessories, the masks are practically one and the same — so the scoop applies across-the-board. Where the difference shows up the specific mask is called out.

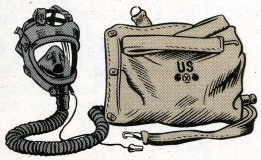
The tank masks operate on their own canisters (in or out of the carrier), or they can be hooked into a vehicle's gas particulate filter unit. The aircraft mask works on its own canister (in or out of the carrier), and it can be hooked into the aircraft's oxygen system, or into a bailout oxygen bottle.

Before you close-in on your mask, whichever one you use, here are some special PM pointers that'll save you a lot of sweat—

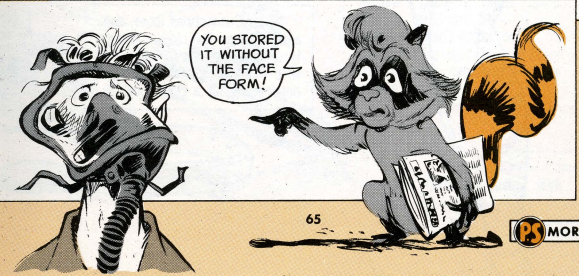
1. Never store your mask without its fibreboard faceform. If the faceform's missing or damaged use crushed newspaper (or any other soft paper) inside the facepiece, before you store or turn-in the mask. Without the faceform, or some kind of support, the faceblank and the eyelens will be distorted by permanent set.



2. Never store a wet mask in its carrier, and make sure the carrier is dry before you slip the mask inside. And, always place the mask in the carrier with the lens resting against the carrier's flannel lining.



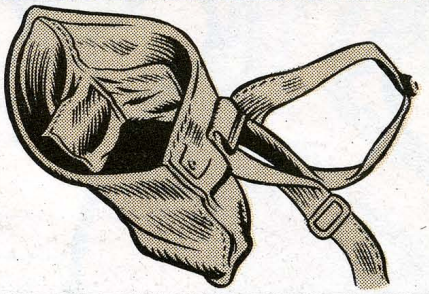
3. Never let grime, sand, or grit hang on to your mask or carrier for any longer than you can help. The stuff'll scratch the lens, clog the valves, and damage the faceblank, the valve disks, the hose and the canister. First chance you get brush or wipe the stuff off.

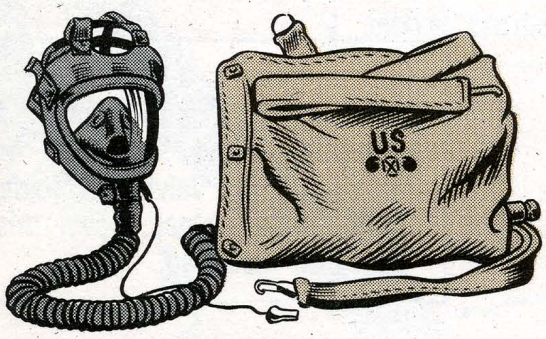


PS MORE

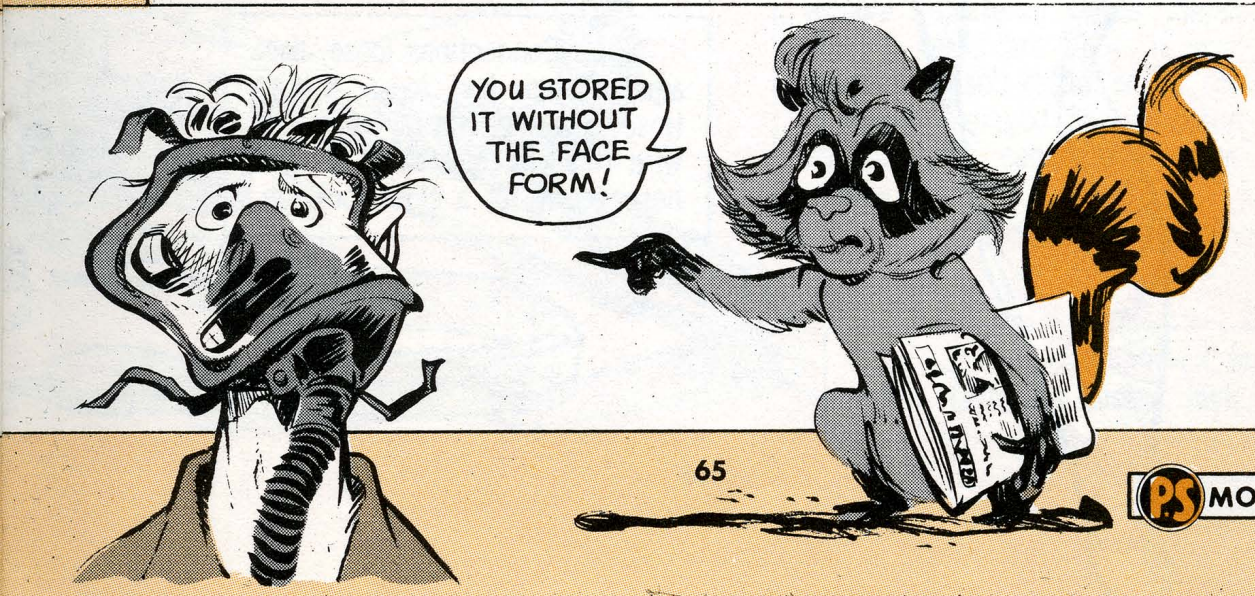
ECTIVE CARE

2. Never store a wet mask in its carrier, and make sure the carrier is dry before you slip the mask inside. And, always place the mask in the carrier with the lens resting against the carrier's flannel lining.

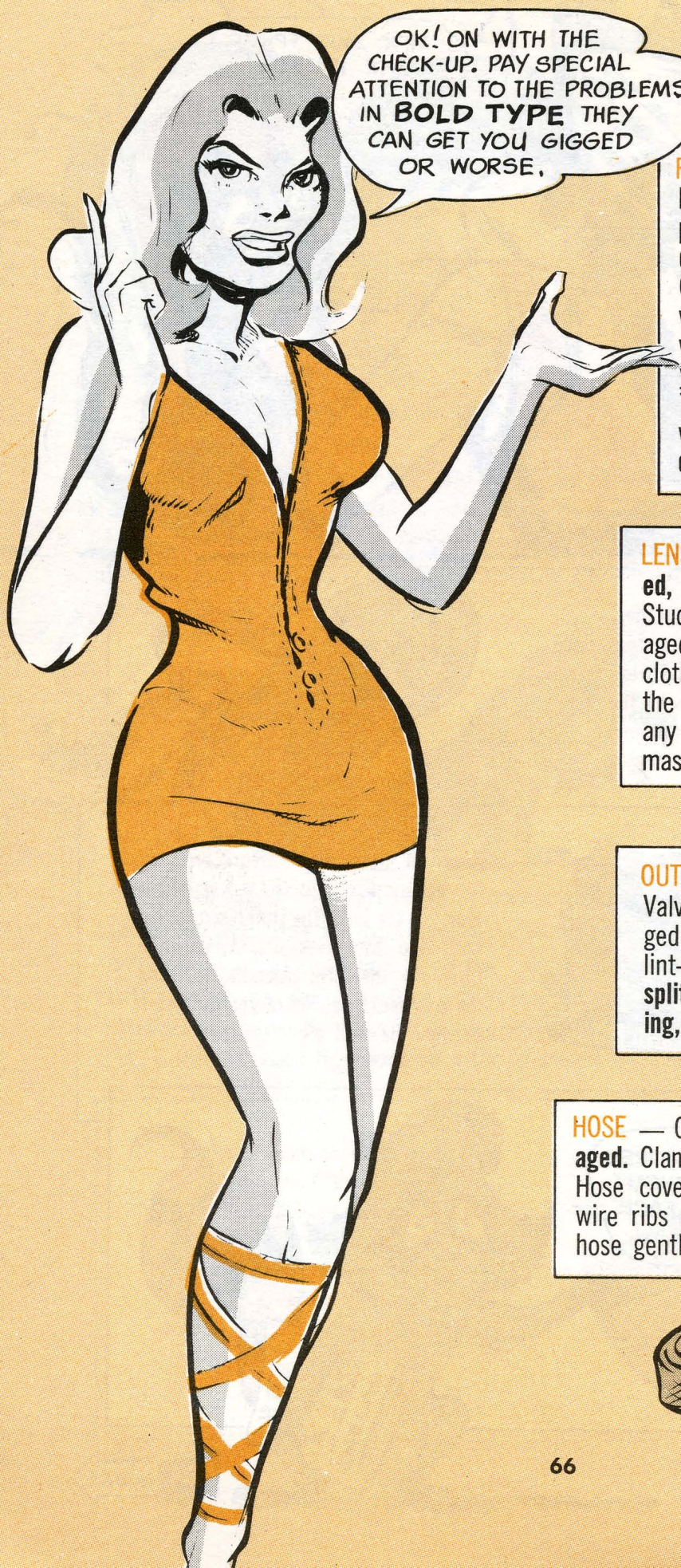




3. Never let grime, sand, or grit hang on to your mask or carrier for any longer than you can help. The stuff'll scratch the lens, clog the valves, and damage the faceblank, the valve disks, the hose and the canister. First chance you get brush or wipe the stuff off.



P.S MORE



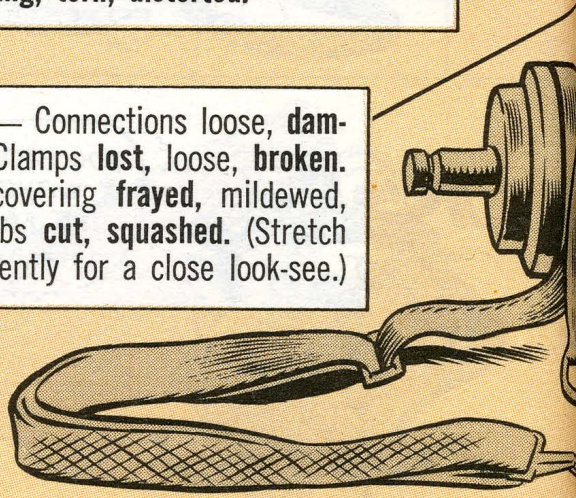
CHECK ✓

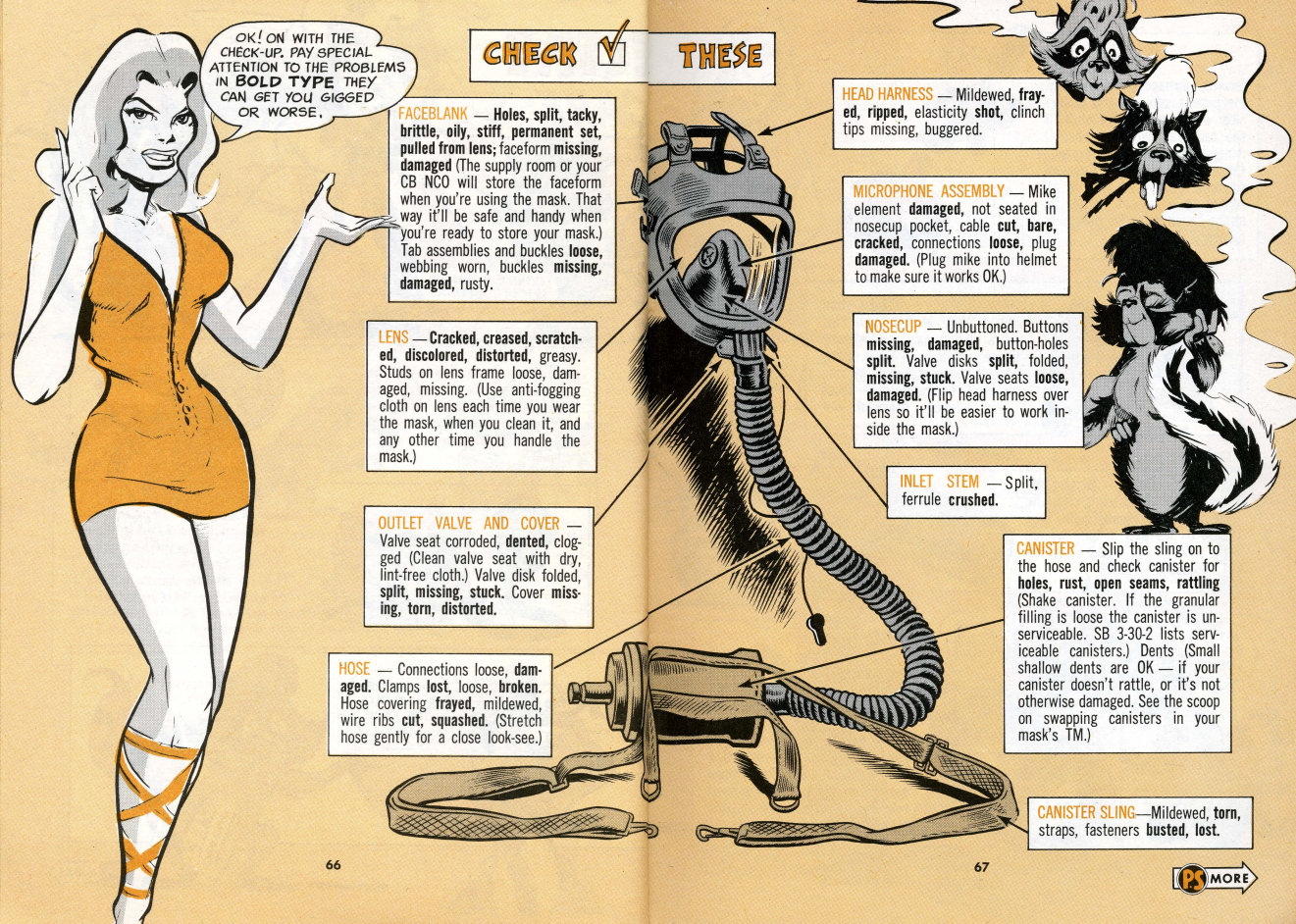
FACEBLANK — **Holes, split, tacky, brittle, oily, stiff, permanent set, pulled from lens;** faceform **missing, damaged** (The supply room or your CB NCO will store the faceform when you're using the mask. That way it'll be safe and handy when you're ready to store your mask.) Tab assemblies and buckles **loose,** webbing worn, buckles **missing, damaged,** rusty.

LENS — **Cracked, creased, scratched, discolored, distorted,** greasy. Studs on lens frame loose, damaged, missing. (Use anti-fogging cloth on lens each time you wear the mask, when you clean it, and any other time you handle the mask.)

OUTLET VALVE AND COVER — Valve seat corroded, **dented,** clogged (Clean valve seat with dry, lint-free cloth.) Valve disk folded, **split, missing, stuck.** Cover **missing, torn, distorted.**

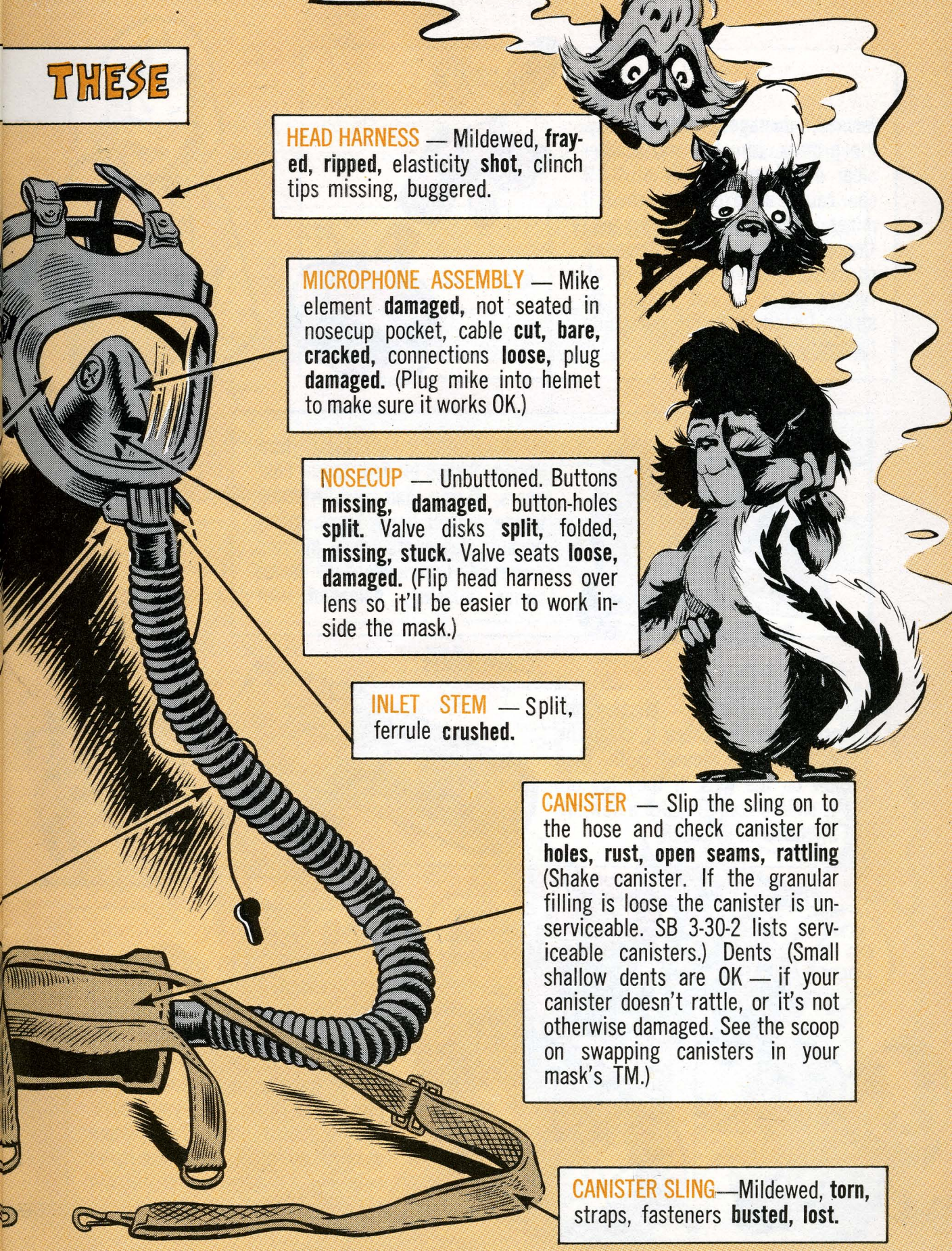
HOSE — Connections loose, **damaged.** Clamps **lost,** loose, **broken.** Hose covering **frayed,** mildewed, wire ribs **cut, squashed.** (Stretch hose gently for a close look-see.)




OK! ON WITH THE CHECK-UP. PAY SPECIAL ATTENTION TO THE PROBLEMS IN **BOLD TYPE** THEY CAN GET YOU GIGGED OR WORSE.
CHECK ✓ THESE
FACEBLANK — **Holes, split, tacky, brittle, oily, stiff, permanent set, pulled from lens;** faceform **missing, damaged** (The supply room or your CB NCO will store the faceform when you're using the mask. That way it'll be safe and handy when you're ready to store your mask.) Tab assemblies and buckles **loose,** webbing worn, buckles **missing, damaged,** rusty.
LENS — **Cracked, creased, scratched, discolored, distorted,** greasy. Studs on lens frame loose, damaged, missing. (Use anti-fogging cloth on lens each time you wear the mask, when you clean it, and any other time you handle the mask.)
OUTLET VALVE AND COVER — Valve seat corroded, **dented,** clogged (Clean valve seat with dry, lint-free cloth.) Valve disk folded, **split, missing, stuck.** Cover **missing, torn, distorted.**
HOSE — Connections loose, **damaged.** Clamps **lost,** loose, **broken.** Hose covering **frayed,** mildewed, wire ribs **cut, squashed.** (Stretch hose gently for a close look-see.)
HEAD HARNESS — Mildewed, **frayed, ripped,** elasticity **shot,** clinch tips missing, buggered.
MICROPHONE ASSEMBLY — Mike element **damaged,** not seated in nosecup pocket, cable **cut, bare, cracked,** connections **loose,** plug **damaged.** (Plug mike into helmet to make sure it works OK.)
NOSECUP — Unbuttoned. Buttons **missing, damaged,** button-holes **split.** Valve disks **split,** folded, **missing, stuck.** Valve seats **loose, damaged.** (Flip head harness over lens so it'll be easier to work inside the mask.)
INLET STEM — Split, ferrule **crushed.**
CANISTER — Slip the sling on to the hose and check canister for **holes, rust, open seams, rattling** (Shake canister. If the granular filling is loose the canister is unserviceable. SB 3-30-2 lists serviceable canisters.) Dents (Small shallow dents are OK — if your canister doesn't rattle, or it's not otherwise damaged. See the scoop on swapping canisters in your mask's TM.)
CANISTER SLING—Mildewed, **torn,** straps, fasteners **busted, lost.**

PS MORE

THESE



HEAD HARNESS — Mildewed, **frayed, ripped,** elasticity **shot,** clinch tips missing, buggered.

MICROPHONE ASSEMBLY — Mike element **damaged,** not seated in nosecup pocket, cable **cut, bare, cracked,** connections **loose,** plug **damaged.** (Plug mike into helmet to make sure it works OK.)

NOSECUP — Unbuttoned. Buttons **missing, damaged,** button-holes **split.** Valve disks **split,** folded, **missing, stuck.** Valve seats **loose, damaged.** (Flip head harness over lens so it'll be easier to work inside the mask.)

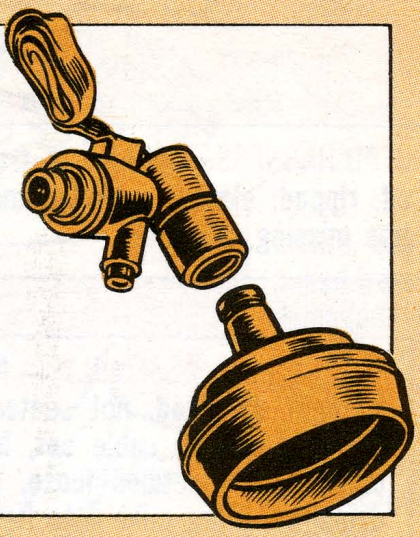
INLET STEM — Split, ferrule **crushed.**

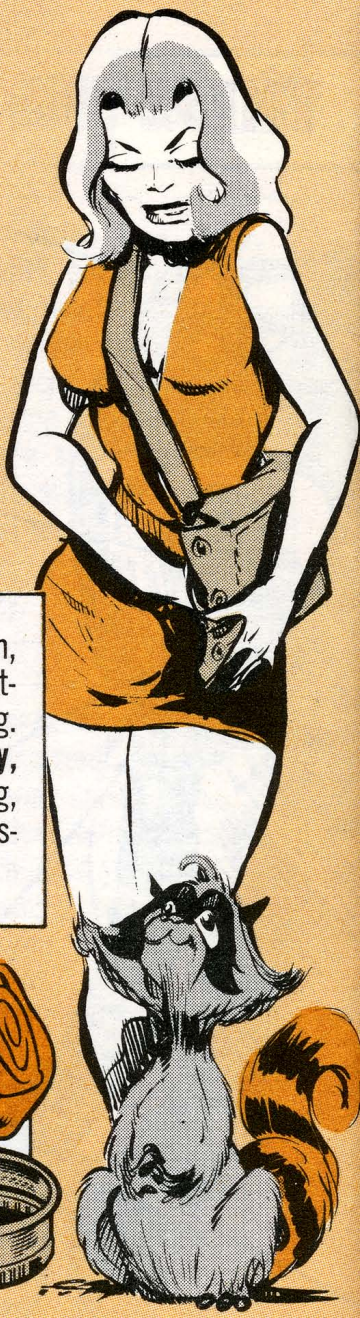
CANISTER — Slip the sling on to the hose and check canister for **holes, rust, open seams, rattling** (Shake canister. If the granular filling is loose the canister is unserviceable. SB 3-30-2 lists serviceable canisters.) Dents (Small shallow dents are OK — if your canister doesn't rattle, or it's not otherwise damaged. See the scoop on swapping canisters in your mask's TM.)

CANISTER SLING—Mildewed, **torn,** straps, fasteners **busted, lost.**

P.S MORE

M8 OXYGEN SUPPLY ADAPTER (aircraft mask only) — Rubber cup **deformed, damaged, oily, greasy.** (Keep mask, canister, and adapter clear of all greasy, oily stuff. It can cause an explosion when it mixes with pressurized oxygen.) Connectors and socket **damaged,** corroded. (When the M8 is attached to a bailout bottle, its straps fasten on to the parachute harness.)

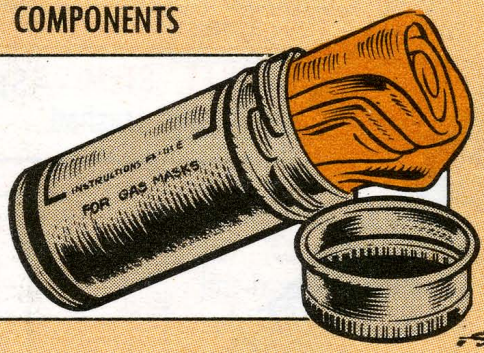


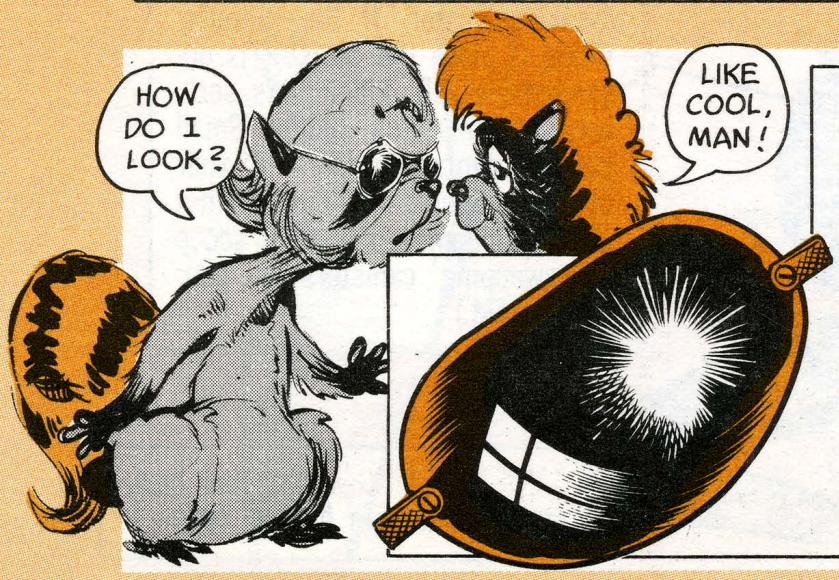


MASK CARRIER — Frayed, torn, ripped. Straps **busted,** loose. Fasteners, D-ring damaged, missing. Inside — felt lining loose, **grimy,** pockets, fasteners loose, missing, damaged. Components or accessories **missing, damaged.**

COMPONENTS

ANTIFOGGING KIT — **Missing, unserviceable.** (To check it, clean the lens with the flannel cloth, then blow on the lens. If they fog up, the cloth's done for. Get a new kit, FSN 6850-127-7193.)





ANTIGLARE EYELENS OUTSERT (aircraft mask only) — **Scratched, cut, creased.** (Replace outsert if it distorts your vision (FSN 4240-961-1062). To remove the antiglare outsert from the mask pull straight out on each snap fastener. If you pull 'em any other way you'll damage the mask's studs. CV crewmen get the antiglare eyelens outsert only when they're authorized the M3 winterization kit.)

ACCESSORIES

You may not be issued all accessories for the masks. But, whatever accessories you get, give them the same close check you give your mask. The items line up like so:

ITEM	TANK MASKS	AIRCRAFT MASK
Optical inserts (For those who wear specs. See AR 40-3)	X	X
M3 Winterization Kit	X	X
M7 Protective Hood		X
M5 Protective Hood	X	
M13 Decon and Reimpregnating Kit	X	X
Canister Coupling	X	
M8 Oxygen Supply Adapter		X

The mask's carrier has special pockets for the items. Check your TM so's you'll know you have things stored right. And, make sure none of the stuff crowds the facepiece.

MASK ID

Your outfit sets up its own code system for identifying individual masks. The code can be made up of letters and/or numbers, or whatever, just so it doesn't identify the unit . . . and, it's different from the mask codes used by the neighboring outfits. The date the mask is tested and fitted can be added to the code.

Use tags or removeable tape to mark the masks and the carriers. Ink, grease pencil, etc. are taboo markers.

MASK STORAGE

Careful handling and safe storage can add up to about half of your mask PM chores—and will also help to keep the mask serviceable for as long as you need it. So stick to the handling and storage scoop in your mask's TM. First and foremost, always remember to replace the faceform (or use crushed paper) when you're not using the mask, when you're storing it, or turning it in for repair or replacement.

When you've used the mask without the carrier, return the mask to the carrier careful-like. For example:

Wrap the straps even-like around the canister and fasten the strap's snaphooks to their D-rings. Place the canister in the carrier so the canister coupling connector extends through the opening in the back of the carrier. Turn the canister so the hooks and D-rings will be away from your body when you wear the carrier. Fasten the flaps on the bottom of the carrier around the hose.

Nest the head harness, mike cable, and the middle section of the hose into the facepiece. Remember to head the lens into the flannel lining.

Supply room note — If the masks are kept in the permanent shipping containers, it's a good idea to list the mask codes on the separate storage compartments. If containers aren't handy, hang the masks by the carrier straps or D-ring. And, find a dark, cool, dry place for 'em.

MASK CLEANING

To give the mask a good cleaning use a clean, lint-free cloth (FSN 8305-222-2423), warm, soapy water and a soft brush (a small paint brush will do).

Wring the cloth out practically dry and wipe the facepiece real good inside and out. While you're cleaning, be sure to keep the canister sitting up high and hold the mask upside down, so's you'll not accidentally get water in the canister or in the hose. And, be sure to keep water off the mike element.

With the dry brush, clean around the mike element, nosecup valves, around the nosecup, etc. Take care you don't tear or brush off the nosecup valve disks.

Rinse the facepiece with a cloth wrung out in clear water. Dry it with a soft, lint-free cloth, or let it air dry. Never use paper.

Clean the lens with Plastic Polish, FSN 7930-634-5340, and use the anti-fogging cloth on it.

Brush or wipe off the hose the canister and the canister sling.

And, remember — in between regular clean-ups, make sure there's no grit or sand on the mask or the carrier.

PUBS CHECK

M14A2 and M25	TM 3-4240-223-14 (Feb 70), and TM -25P (Jun 62).
M25A1	TM 3-4240-255-14 (Feb 71).
M24	TM 3-4240-219-14 (Sep 70).
A11	SB 3-30-2 (Nov 70), Protective Mask Canisters and Filter Elements.

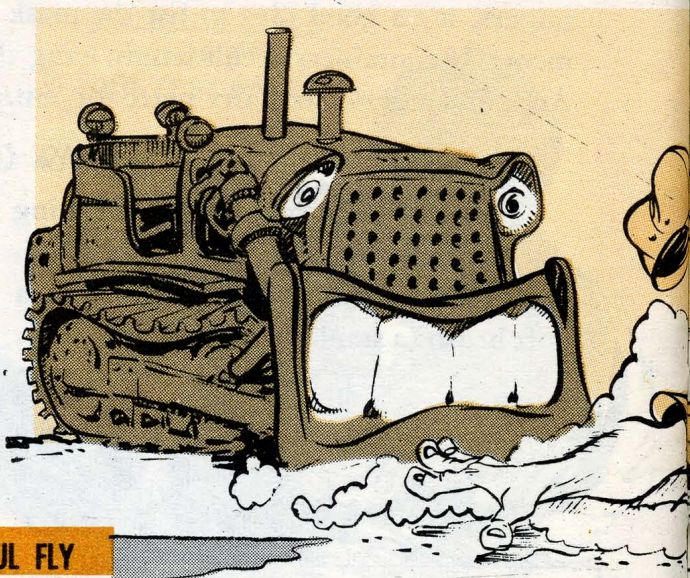
PS END

HEAVY EQUIPMENT OPERATOR . . . THIS TURBO GAME

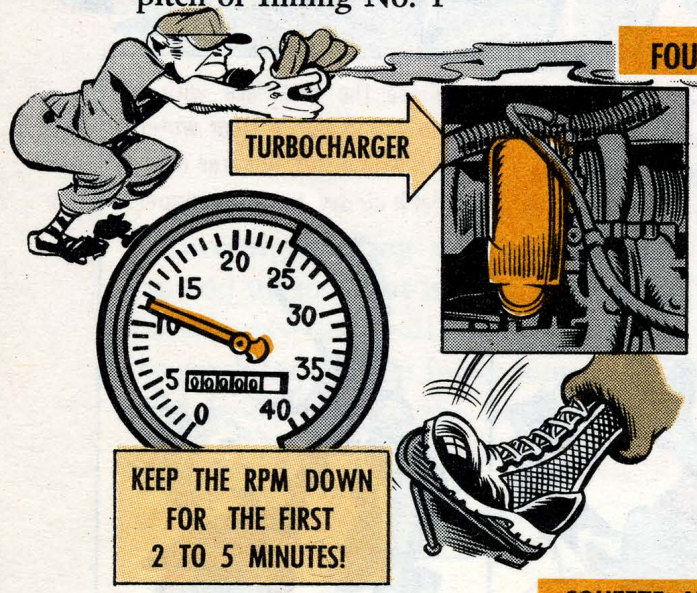
It's your ball game, Mr. Heavy Equipment Operator . . . 290M tractor, or D7E or D9 or HD-41 or whatever. You're team manager.

Like for any 9 or 19 innings, you gotta get hits — and the leadoff man in this heavy-stuff game is your turbocharger.

But there're 4 kinds of miscues you could make to ruin your ball game. One of 'em could hack you right on the first pitch of Inning No. 1 —



FOUL FLY



GUNNING — If you rev up your engine right after you start, your turbo will take right off into high RPM. But it takes 1 to 1¾ minutes to get oil from your crankcase pump to your turbo's bearings.

Result: That turbo overheats in a few seconds without lube, and bearings melt down.

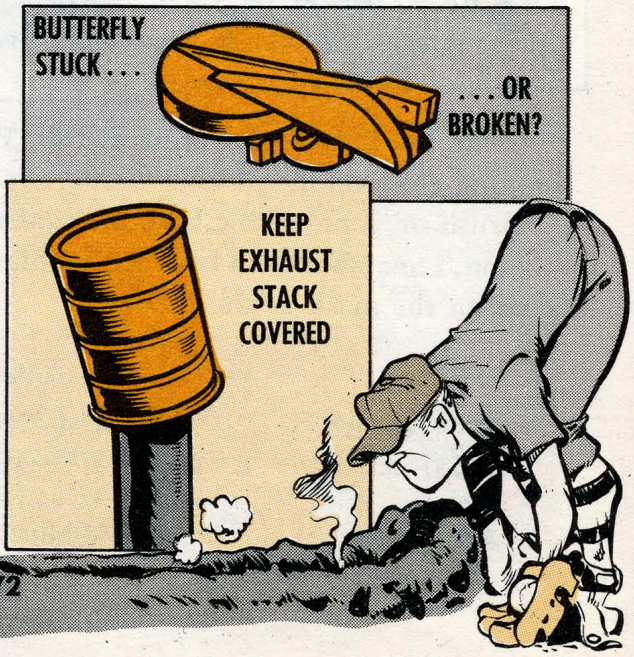
Cure: Keep speed down to idling RPM for the first 2 to 5 minutes.

SQUEEZE AT SECOND

BUM EXHAUST BUTTERFLY RAIN CAP — Stuck shut, it forces carbon and grit right back thru the turbo cage. Stuck open, missing, or broken, it lets in grit and rain.

Result: Particles of dirt and water accelerated to hundreds of miles an hour cut away like tiny missiles, tearing your turbo apart.

Cure: Keep that rain cap cover in good shape. If it's missing, cover the exhaust stack hole with a can when you stop.

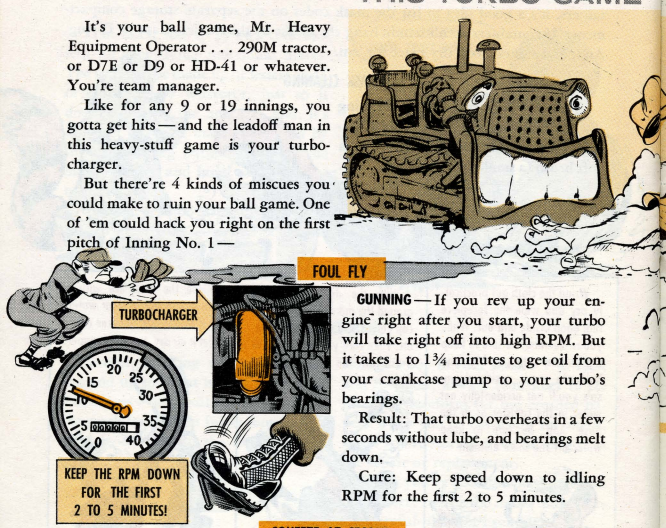


HEAVY EQUIPMENT OPERATOR . . . THIS TURBO GAME IS FOR REAL

It's your ball game, Mr. Heavy Equipment Operator . . . 290M tractor, or D7E or D9 or HD-41 or whatever. You're team manager.

Like for any 9 or 19 innings, you gotta get hits — and the leadoff man in this heavy-stuff game is your turbocharger.

But there're 4 kinds of miscues you could make to ruin your ball game. One of 'em could hack you right on the first pitch of Inning No. 1 —



FOUL FLY

GUNNING — If you rev up your engine right after you start, your turbo will take right off into high RPM. But it takes 1 to 1¾ minutes to get oil from your crankcase pump to your turbo's bearings.

Result: That turbo overheats in a few seconds without lube, and bearings melt down.

Cure: Keep speed down to idling RPM for the first 2 to 5 minutes.

SQUEEZE AT SECOND

BUM EXHAUST BUTTERFLY RAIN CAP — Stuck shut, it forces carbon and grit right back thru the turbo cage. Stuck open, missing, or broken, it lets in grit and rain.

Result: Particles of dirt and water accelerated to hundreds of miles an hour cut away like tiny missiles, tearing your turbo apart.

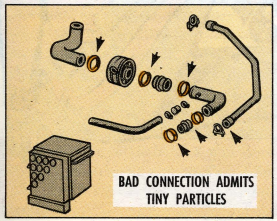
Cure: Keep that rain cap cover in good shape. If it's missing, cover the exhaust stack hole with a can when you stop.

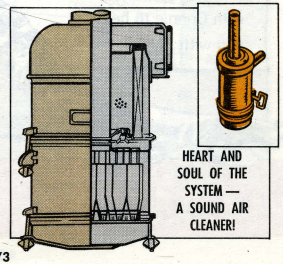
CAUGHT OFF BASE

LEAKY OR DIRTY AIR SYSTEM — Filter cores with holes in their shells, misfitted or missing ducts and gaskets, dust cups or cores left uncleaned or damaged let grit enter.

Result: Turbocharger sand-blasted out of existence, and eventually the engine ruined as well.

Cure: An air cleaner that lets your engine get plenty of grit-free breathing comes easy if you get with such on-the-ball strategy as given in TM 5-2410-214-12, page 3-2, TM 5-2420-206-12, Fig 3-7, or TM 5-3805-201-15, page 60 . . . that and good cleanup hitting.



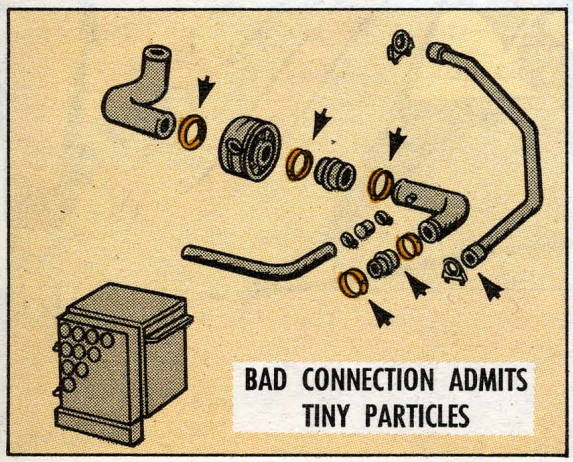


CAUGHT OFF BASE

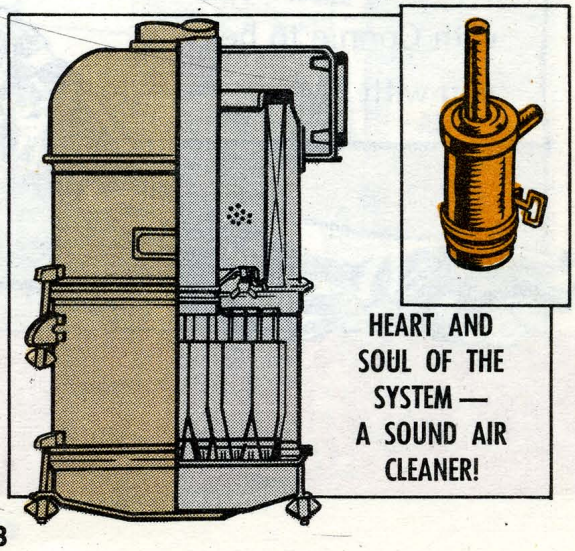
LEAKY OR DIRTY AIR SYSTEM — Filter cores with holes in their shells, misfitted or missing ducts and gaskets, dust cups or cores left uncleaned or damaged let grit enter.

Result: Turbocharger sand-blasted out of existence, and eventually the engine ruined as well.

Cure: An air cleaner that lets your engine get plenty of grit-free breathing comes easy if you get with such on-the-ball strategy as given in TM 5-2410-214-12, page 3-2, TM 5-2420-206-12, Fig 3-7, or TM 5-3805-201-15, page 60 . . . that and good cleanup hitting.



BAD CONNECTION ADMITS TINY PARTICLES



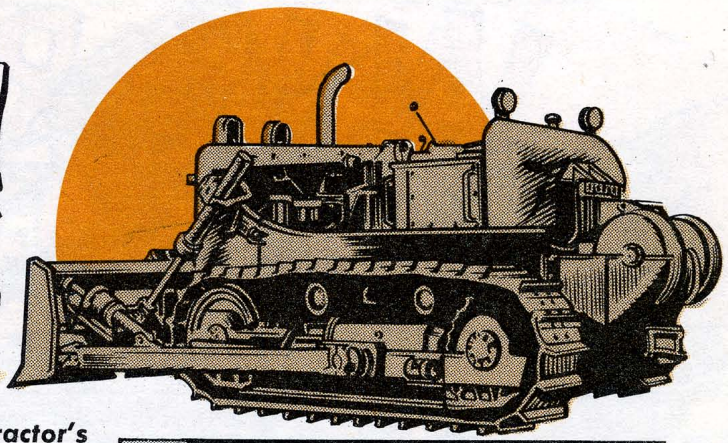
HEART AND SOUL OF THE SYSTEM — A SOUND AIR CLEANER!

SUDDEN, QUICK SHUTDOWN — You come rolling in home, but you'll be called out for missing 3rd base if you just brake to a stop and chop the throttle and kill the engine, kerbam. Turbos turn faster than 70,000 RPM lots of times . . . and from that speed, it takes 4 to 6 minutes to stop. During those minutes, bearings must have oil. But with your engine dead, they get not a drop. Besides, that exhaust-driven turbo cage gets H O T!!!

Without oil for either lube or cooling, blades flake off, bearings seize, shafts break . . . and there you are outside the base line on your face.

Cure: Run at idle before shutting down engine even longer than you did to start up. That'll do the rest of your engine a favor, too. It'll cool off even-like then, valves will warp less, rings will wear longer, and cylinder heads won't warp.

NOTHING SAID MEANS SOMETHING

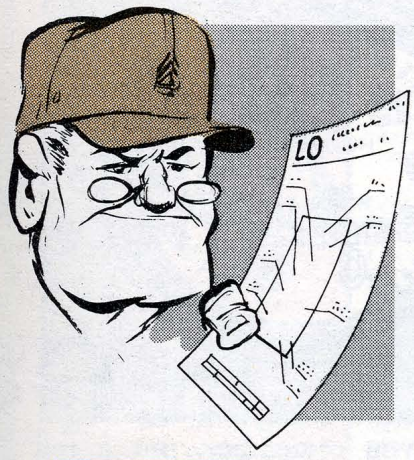


Dear Half-Mast,

Do we run or stop our HD16M tractor's engine when checking the steering clutch and bevel gear oil level? TM 5-2410-209-12 and LO 5-2410-209-12-2 are not too clear on this point.

MSG D. W. S.

STOP ENGINE TO CHECK STEERING CLUTCH AND BEVEL GEAR OIL FILL.



Dear Sergeant D. W. S.,

Normally, when a TM, LO or a dipstick itself does not spell out how an oil level check is to be made you can assume that the check is made with the equipment engine not running. Since no specific instructions are given on the HD16M's steering clutch and bevel gear oil check, the right way to do it is with the engine stopped.

Half-Mast

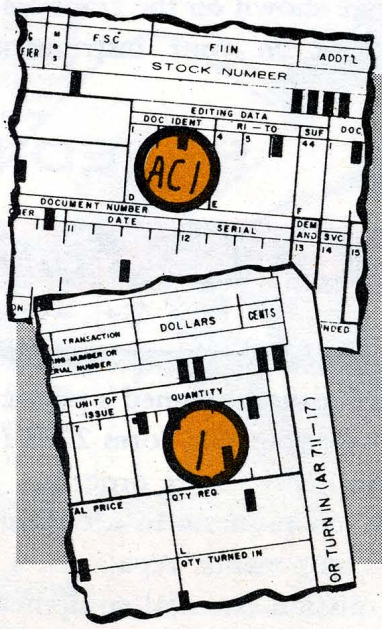
CANCEL CANCEL CANCEL

Call out loud, clear and fast.

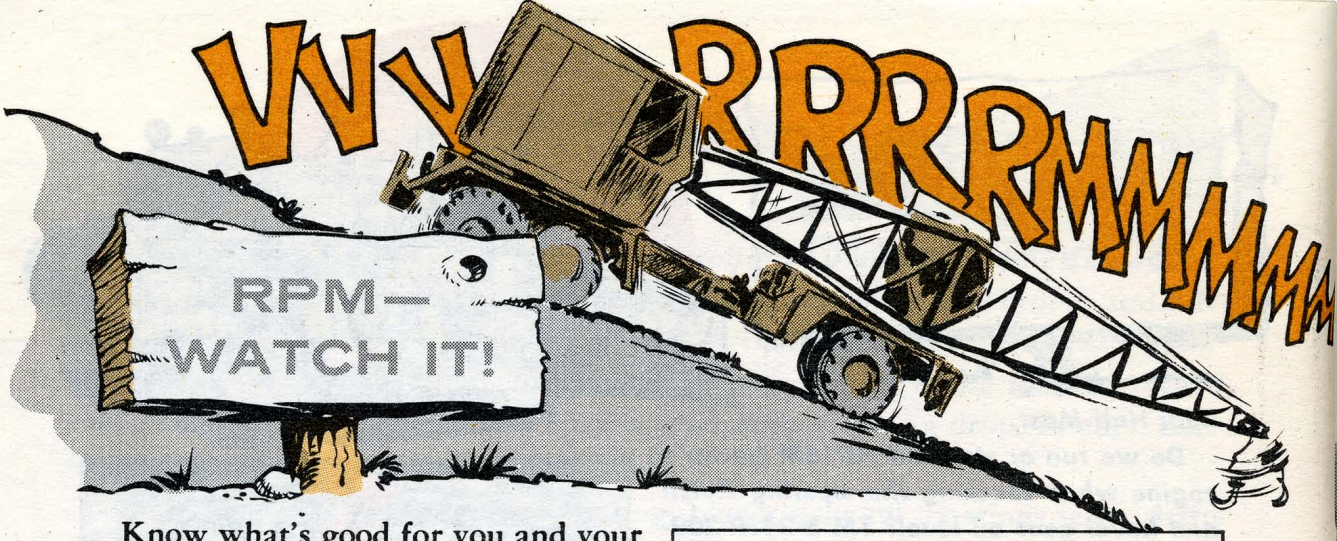
If you no longer need it, tell your supply support . . . like RIGHT NOW.

If you keep requests alive for supplies you no longer need, you—burn up $$$$$ in supplies, shipping costs, man-hours and deadline time. You short-change others who really need 'em.

Canceling is easy. Just add cancellation code (AC1) to your supply status card (block D), fill in block 8, and shoot the card in to supply support. Para 4-8c, AR 735-35 covers scoop on canceling requests.



ADD THE CANCELLATION CODE AND QUANTITY



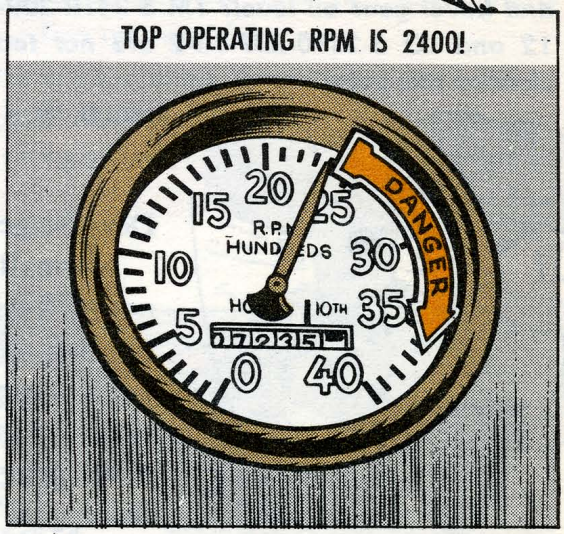
Know what's good for you and your M320T 20-ton truck-mounted crane. Never overspeed the carrier engine.

Top operating (load) RPM is 2400. Go above that and you're in trouble. No-load, the maximum is 2600 RPM.

One tell-tale sign that the governed RPM has been exceeded is a busted distributor rotor.

'Course, it's better all around when a $1 rotor takes the brunt of it all rather than blowing a costly engine—or your skin. But, why take chances?

Keep an eye on the tachometer and the speedometer at all times. Watch 'em when you're going down a steep grade. Never exceed the MPH and the matching gear range shown on the transmission data plate on your instrument panel.



To help you remember, put a red danger arrow decal on your tachometer glass, if there's none there. Start it at that operating maximum, the 2400 mark. And stay out of the danger zone.

You get the decal with FSN 7690-924-4318.

SPEED-UP CODE

When your outfit's assigned a project code, such as PCC for designated STRAF units, make sure your DA Form 2765 (block 19, cols 57-59) shows the code if it applies to the items you're ordering. Project code PCC is used by designated STRAF units on requests to fill mission-essential equipment shortages and on requests for components, repair parts or other supplies required to return non deployable, mission-essential equipment to deployable status.

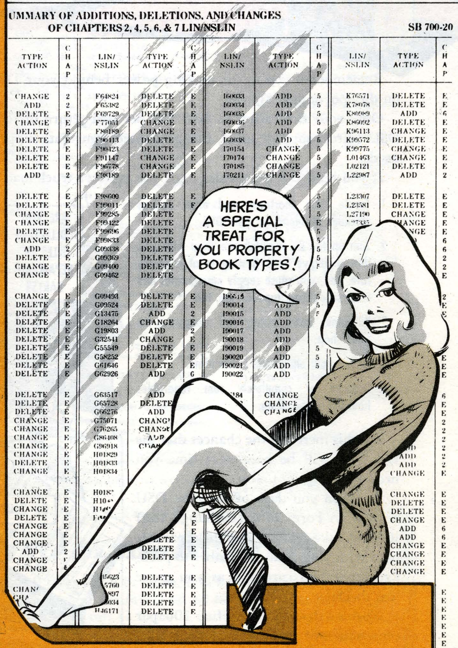
SB 700-20 CHECK LIST

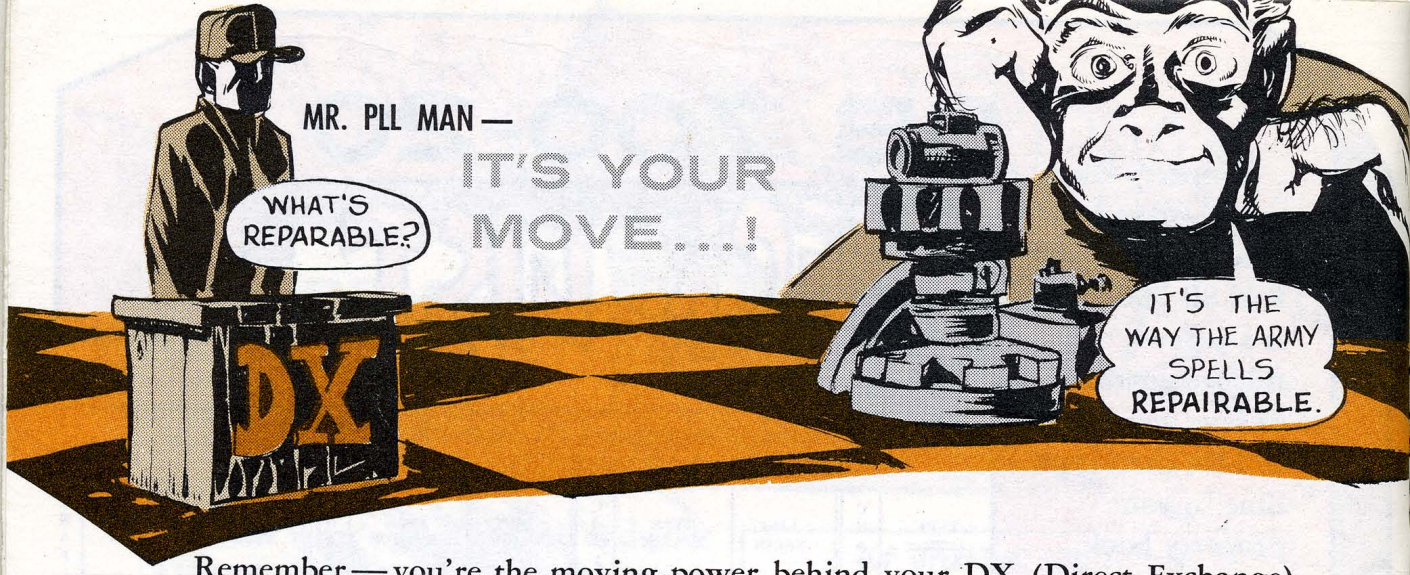
Property-book types—have you checked Appendix F in SB 700-20? It's a new feature geared to save you loads of LIN checking time in your property book operation.

The appendix sums up the latest additions, deletions and changes in the SB's Chapters 2, 4, 5, 6 and 7. And, incidentally, in App F, **change** simply means that the LIN has swapped chapters since the last SB.

App F uses only 3 column headings: **LIN, Action** (taken on the LIN), and **Chapter.**

The chapter column identifies the chapter where the LIN was added, or the chapter from which the LIN was deleted, or the chapter where the LIN is currently listed—when the action column reads **change.**





Remember — you're the moving power behind your DX (Direct Exchange), on-the-spot supply system.

Only your dedication to fast, 100 per cent return of reparable items to your DSU (direct support unit), can guarantee immediate supply for your future DX needs.

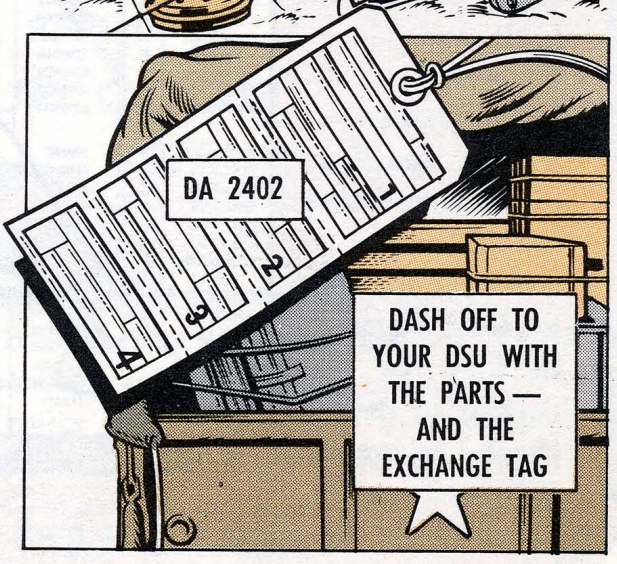
If you hold DX reparables until you collect a truck load for your DSU, you —

1. Create false shortages and other serious stockage problems for your DSU.
2. Jam up the DX maintenance shop with jobs that should've been flowing in at a steady rate. And, you cause supply emergencies and work scheduling flaps for 'em, too.
3. Kill time, waste money and manpower for your shop.
4. Extend your equipment's downtime.
5. Damage or completely ruin reparables hoarded at your shop.

All this increases the chances that the DX bins will be bare next time you need fast help.

So when you dash off to your DSU with a DA Form 2402 (Exchange Tag) in hand, take time to carry the reparable item with you. And, remember to package reparables carefully as you move 'em to DSU.

Nothing less than careful, 100 per cent return of reparables to your DSU can provide 100 per cent immediate return of supplies to you.



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Jun 70), and Ch 4 (Feb 71), TM's, TB's, etc; DA Pam 310-6 (Jul 70), and Ch 3 (Apr 71), SC's and SM's; DA Pam 310-7 (Feb 71), MWO's; and DA Pam 310-9 (May 69), COMSEC Pubs.

TECHNICAL MANUALS

TM 1-CH47-S C7, Apr, CH-47A, B, C
TM 3-1040-219 C3, Apr, M4A2 Trk Mtd Flame Thrower
TM 3-4240-255-14, Feb, Mask, CBR, Tank M25A1
TM 5-337-1, Mar, Drier-Mixer, Bituminous
TM 5-2420-221-24, Mar, M480CK Whld Tractor
TM 5-2805-203-14 C1 & -24P C2, Apr, Eng: Gas, 6 HP, MS
TM 5-2805-257-24P C2, Apr, Engines 1½-3 HP, MS
TM 5-2805-259-24P C2, Apr, MS 10-20 HP Gas Engines
TM 5-3431-228-14 C1, Apr, Welding Mach
TM 5-3610-246-24P, Mar, Paper Cutter
TM 5-3805-237-12 C4, May, Grader 440HA
TM 5-4110-227-24P, Mar, 10,000 BTU Refrig Unit
TM 5-4120-222-14 C1 & -24P C1, May, 18,000 BTU Air Cond
TM 5-4210-213-12 C1, Mar, Truck: Fire Fighting MOL45AZWLF
TM 5-4310-219-20P, Mar, 600 CFM Air Compressors
TM 5-4310-229-20P C1, Apr, 250 CFM Air Compres
TM 5-4310-250-20P C1, Apr, 250 CFM Air Compres
TM 5-4320-251-14, Mar, 100 GPM Fresh Water Pumps
TM 5-4440-211-13, Mar, Dehumidifiers
TM 5-4520-227-14 C3, Apr, 60,000 BTU Space Heaters
TM 5-4610-202-20P, Mar, Water Purif
TM 5-4930-212-15 C2 & -25P C1, Apr, Petrol Dist
TM 5-6115-942-20P C2, Apr, 150 KW & Up Gen Set
TM 5-6615-292-25P C2, Apr, 150 KW and Up Eng Drvn Gen Sets
TM 5-6115-321-15 C3, Mar, 30 KW, 60 Cyc ED Gen Sets
TM 5-6675-296-12 C1, Apr, Surveying Equip
TM 11-1520-214-20P, Apr, OH-6
TM 11-5092 C5, May, R-394/U Radio Receiver
TM 11-5805-367-25P/3-1, Mar, Multiplexer TD-352/U
TM 11-5810-222-ESC, Apr, TSEC/KG-13, TSEC/KG-13A
TM 11-5810-225-ESC, Mar, TSEC/KY-3 & TSEC/KY-3A
TM 11-5810-231-ESC, Apr, TSEC/HN-9A
TM 11-5820-477-20P, Mar, AN/GRA-39
TM 11-5820-595-12, Feb, Radio Set AN/GRC-143
TM 11-5821-260-20 C3, Mar, OH-58
TM 11-5985-335-15, Mar, AN/GRC-66, -68 & -144 Radio Sets
TM 11-6625-333-15, Mar, AN/GRC-26 & -41
TM 11-6625-2450-15, Feb, PP-6239/U
TM 55-450-3 C2, Mar, UH-1
TH 55-1100-213-12-12, Mar, CH-47A, CH-34, CH-54A & UH-1
TM 55-1510-201-10/5 C5, Apr, U-8
TM 55-1510-201-20P-1 C3, Apr, U-8
TM 55-1510-203-PMP, Mar, U-6
TM 55-1510-203-10 C1, May, U-6
TM 55-1510-204-20PMD/1 C1 & -20PMI/1 C1, Mar, OV-1D

LUBRICATION ORDERS

LO 5-2410-209-12-1 & -2, Mar, HD16M Tractor
LO 5-3810-206-12-1, Mar, Crane-Shovels, Crawlers, 40 Ton
LO 5-3810-206-12-2, 12-3, 12-4 & 12-5, Mar, Crane Shovels, Crawlers, 40 Ton
LO 10-3930-620-12, Mar 6,000 Lb Elec Forklift

MODIFICATION WORK ORDERS

9-1090-203-30/2, May, Armament Subsys, Helicopter
9-1430-501-30/67 C1, Apr, Hawk
9-1430-512-30/14, Apr, Hawk,
9-1430-516-30/1, Apr, Hawk, AN/MSW-9
9-2320-218-30/7, Feb, M151A2 Tire Chain
9-2350-217-30/22, Apr, 105-MM M108 SP Howitzer
9-2350-217-30/27, Apr, 155-MM SP Howitzer Mount M127
9-2520-249-30/1, Apr, M551
11-5821-259-40/1 C1, May, OH-6A
55-1500-210-20/1 C1, May, CH-47A, B, C
55-1510-201-20/1 C2, Apr, U-8
55-1510-201-30/5 C3 & -40/2 C2, May, U-8
55-1510-205-30/6 C3 & C4, May, U-1
55-1520-209-30/48 C2, Apr, CH-47A
55-1520-219-30/1 C2, Apr, UH-1A, B, C
55-1520-221-30/6 C3, May, AH-1G
55-1520-227-30/19 C1, May, CH-47B, C
55-1615-248-20/1 C1, May, CH-54A
55-2840-231-30/3, Apr, OH-58
55-2840-232-20/1 C1, Apr, U-21

TECHNICAL BULLETINS

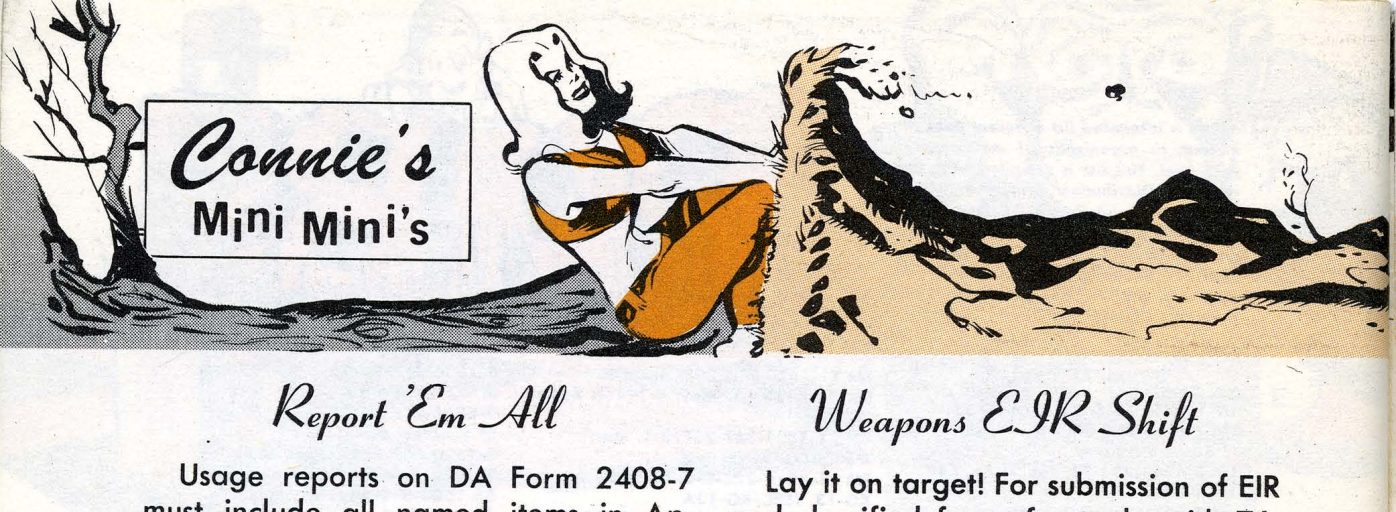
TB 9-2300-295-15/3, May, Vehicle Deficiencies During Warranty Period: M809-Series 5-Ton Truck
TB 9-2300-295- 15/4, Apr, ENDT 673 Mack Diesel Eng Warranty
TB 10-4500-200-13, Mar, Space Heater
TB 9-4931-333-14, Mar, 20-MM XM 163 Gun
TB 9-4931-339-14, Mar, 20-MM XM163 Gun
TB 55-1500-210-20/17 C1 & -20/1B, May, CH-47A, B, C
TB 55-1500-325-25, Mar, AF & RW
TB 55-1520-214-20/39, May, OH-6
TB 55-1520-227-20/13, May, CH-47B, C
TB 55-1520-228-20/4, May, OH-58
TB 750-99-15, May, All F&RW

MISCELLANEOUS

DA Cir 310-8, Jan, Technical and Supply Bulletin
SB 55-35, Apr, All F&RW
SB 700-50, Mar, Expendable Items
SB 742-1425-92-001, Apr, Redeye

MWO of the MONTH

MWO 9-2300-391-40 (Mar 70) is its name, and beefing up auxiliary drives is its game. Your GSU will hang this MWO on all M107 SP guns (serial numbers 1 to 505), M110 SP howitzers (1 to 870) and all M578 light recovery vehicles (1 to 1300). It turns your auxiliary drive into a heavy duty item with improved lubrication and gives you a better fighting vehicle.



Report 'Em All

Usage reports on DA Form 2408-7 must include all named items in Appendix C of TM 38-750 with a Q or S in the "Use Data" column — whether the specific model is listed or not. Note that para 2a of the appendix calls for reports on "all corresponding makes and models."

Get Aid From MAIT

Assistance is emphasized and gigs are gone with the wind in the Maintenance Assistance and Instruction Team (MAIT) program just laid out in detail in AR 750-51 (Apr 71). Teams will make no ratings and no surprise visits, but will offer help thru local commands. This AR supersedes AR 750-8 (the CMMI AR) and DA Msg DCSLOG/MED 281538Z Dec 70.

Use The RPSTL

Your own RPSTL (Repair Parts and Special Tools List) TM is your authority to request an item listed on the Army Master Data File (AMDF). So your supply support should ignore the maintenance code (position 27 of the item identification record) on the AMDF and on the AMDF selected management data microfilm lists. This code will be dropped from future AMDF lists.

Weapons EIR Shift

Lay it on target! For submission of EIR and classified forms for tanks with 76, 90, 105 and 152-MM guns, for SP guns and howitzers and for combat engineer and armored assault vehicles, mark this shift of ECC's FA, FB, FC, GA, GD, GG and GM to the U.S. Army Weapons Command address in Appendix B of TM 38-750 (delete 'em from the USATACOM list). Note also that primary category D in the appendix includes secondary categories A **thru** G and X — not just A, G, X. Word went out in USAMC Msg AMCMA-SI R201801Z May 71.

Nut Missing?

When you order the battery holddown hook bolt-with-nut, FSN 5306-739-7754, for your 2½-ton truck, you may get FSN 5306-753-9501 — just the hook bolt alone, no nut. If so, you can get the right nut under either FSN 5310-043-1904 or FSN 5310-021-3549. (Routing Identifier Code is S91.)

Zap Pollution

Kill — or at least cut — the pollutants your rig's engine exhaust pours into the air you breathe. Most of this pollution results from fuel, air or electrical malfunctions that can be cured by adjustments as spelled out in TB 9-2300-402-10 (Feb 71). Read and heed — for cleaner air.

Would You Stake Your Life right now **on**

Report 'Em All

Usage reports on DA Form 2408-7 must include all named items in Appendix C of TM 38-750 with a Q or S in the "Use Data" column — whether the specific model is listed or not. Note that para 2a of the appendix calls for reports on "all corresponding makes and models."

Get Aid From MAIT

Assistance is emphasized and gigs are gone with the wind in the Maintenance Assistance and Instruction Team (MAIT) program just laid out in detail in AR 750-51 (Apr 71). Teams will make no ratings and no surprise visits, but will offer help thru local commands. This AR supersedes AR 750-8 (the CMMI AR) and DA Msg DCSLOG/MED 281538Z Dec 70.

Use The RPSTL

Your own RPSTL (Repair Parts and Special Tools List) TM is your authority to request an item listed on the Army Master Data File (AMDF). So your supply support should ignore the maintenance code (position 27 of the item identification record) on the AMDF and on the AMDF selected management data microfilm lists. This code will be dropped from future AMDF lists.

Weapons EIR Shift

Lay it on target! For submission of EIR and classified forms for tanks with 76, 90, 105 and 152-MM guns, for SP guns and howitzers and for combat engineer and armored assault vehicles, mark this shift of ECC's FA, FB, FC, GA, GD, GG and GM to the U.S. Army Weapons Command address in Appendix B of TM 38-750 (delete 'em from the USATACOM list). Note also that primary category D in the appendix includes secondary categories A **thru** G and X — not just A, G, X. Word went out in USAMC Msg AMCMA-SI R201801Z May 71.

Nut Missing?

When you order the battery holddown hook bolt-with-nut, FSN 5306-739-7754, for your 2½-ton truck, you may get FSN 5306-753-9501 — just the hook bolt alone, no nut. If so, you can get the right nut under either FSN 5310-043-1904 or FSN 5310-021-3549. (Routing Identifier Code is S91.)

Zap Pollution

Kill — or at least cut — the pollutants your rig's engine exhaust pours into the air you breathe. Most of this pollution results from fuel, air or electrical malfunctions that can be cured by adjustments as spelled out in TB 9-2300-402-10 (Feb 71). Read and heed — for cleaner air.

Generator ID Plate

Some time ago TB 750-971-4 (Oct 70) and PS 216 told about assigning new FSN's and model numbers to your 0.5 through 10-KW mil design generators and stamping them on a new data plate. Fine — but the FSN given for the new ID plate was a fink. FSN 9905-577-4219 will get the cool one.

Blue Is Back

Blue ink is back "in" for making entries on equipment records and other TAMMS forms, even though it's not listed in para 1-7a(2) of TM 38-750. That's mainly because it's more readily available than other inks.

Rules On Repair Limits

If you're called on to do a repair eligibility inspection (Repair Eligibility Data Sheet, DA 3590 — for MECOM items — or Vehicle Classification Inspection, DA 461-5), get your mitts on TB 750-97-01 (Jan 71). It has rules for use of both forms with sample fill.

MIG Welders

Steel wire is a No-No for MIG welding. It'll damage the MIG gun's feeding mechanism. Use only the 3/64-in aluminum wire, FSN 3439-775-6476, which comes in a 1-lb spool. It's called out in your set's parts list, and in SC 3439-IL (Sep 69).

Moving?

If you're moving and need supplies for packaging, preserving, packing and marking, then SB 38-100 (Jul 70) is your baby. It has just about anything you'd need . . . along with information about what the items are used for.

The Why And How Of It

Need to know why and how you got the equipment assigned to your unit? Then bone up on equipment authorization policies and common tables of allowances (CTA) you'll find in the new AR 310-34 (Jun 70). Its appendix B covers items by LIN — from A to Z.

M13 Decon Kit

For scoop on the care and use of the M13 decon and reimpregnating kit, FSN 4230-907-4828, you now have a training film, TF 3-4193. The nearest audiovisual communication center can get it for you.

Safer Snook Seat Belts

Slim-jim type CH-47 troop commanders will stay put with the new 2-point adjustable safety belt, FSN 1680-447-9504. That old safety belt just couldn't be adjusted short enough. Get one in your bird . . . soonest!

Would You Stake Your Life right now on the Condition of Your Equipment?

☆U.S. Government Printing Office: 1971-759-028/1

Generator ID Plate

Some time ago TB 750-971-4 (Oct 70) and PS 216 told about assigning new FSN's and model numbers to your 0.5 through 10-KW mil design generators and stamping them on a new data plate. Fine — but the FSN given for the new ID plate was a fink. FSN 9905-577-4219 will get the cool one.

Blue Is Back

Blue ink is back "in" for making entries on equipment records and other TAMMS forms, even though it's not listed in para 1-7a(2) of TM 38-750. That's mainly because it's more readily available than other inks.

Rules On Repair Limits

If you're called on to do a repair eligibility inspection (Repair Eligibility Data Sheet, DA 3590 — for MECOM items — or Vehicle Classification Inspection, DA 461-5), get your mitts on TB 750-97-01 (Jan 71). It has rules for use of both forms with sample fill.

MIG Welders

Steel wire is a No-No for MIG welding. It'll damage the MIG gun's feeding mechanism. Use only the 3/64-in aluminum wire, FSN 3439-775-6476, which comes in a 1-lb spool. It's called out in your set's parts list, and in SC 3439-IL (Sep 69).

Moving?

If you're moving and need supplies for packaging, preserving, packing and marking, then SB 38-100 (Jul 70) is your baby. It has just about anything you'd need . . . along with information about what the items are used for.

The Why And How Of It

Need to know why and how you got the equipment assigned to your unit? Then bone up on equipment authorization policies and common tables of allowances (CTA) you'll find in the new AR 310-34 (Jun 70). Its appendix B covers items by LIN — from A to Z.

M13 Decon Kit

For scoop on the care and use of the M13 decon and reimpregnating kit, FSN 4230-907-4828, you now have a training film, TF 3-4193. The nearest audio-visual communication center can get it for you.

Safer Snook Seat Belts

Slim-jim type CH-47 troop commanders will stay put with the new 2-point adjustable safety belt, FSN 1680-447-9504. That old safety belt just couldn't be adjusted short enough. Get one in your bird . . . soonest!

the Condition of Your Equipment?

☆U.S. Government Printing Office: 1971-759-028/1

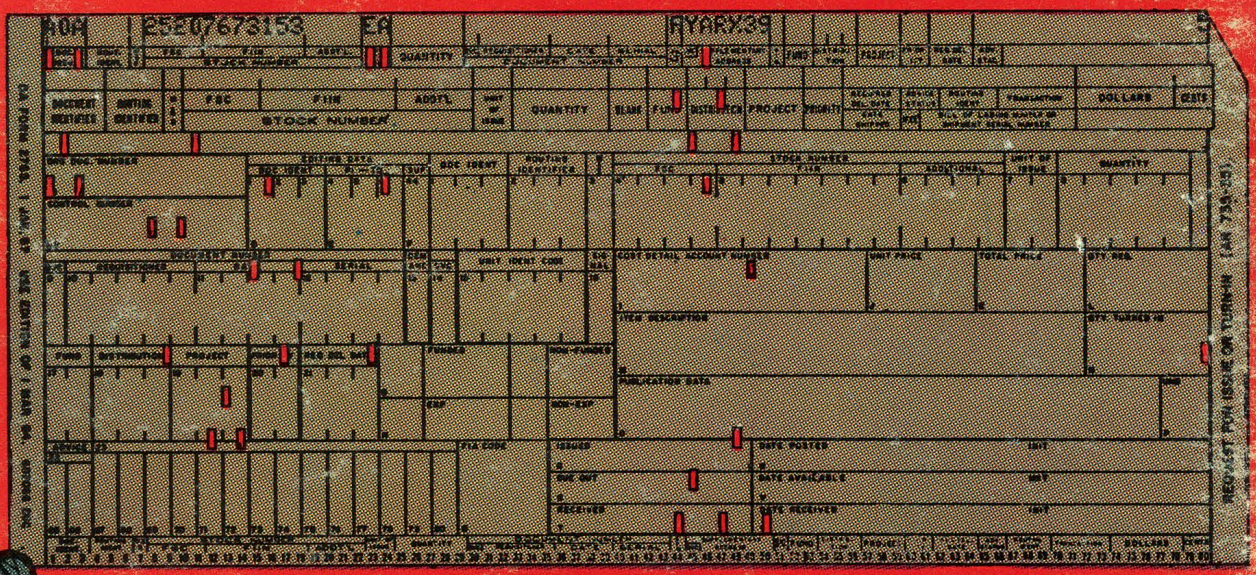
PLL TYPES:

Use Your DA Form 2765 Preprinted/Prepunched Requests...

...and

- CUT DOWN ON YOUR WORK
- PREVENT ERRORS
- SPEED UP SUPPLY

THEY'RE VALUABLE



PROTECT 'EM! USE 'EM